NATION'S BUSINES



November

1927

England's Costly Try at Socialism. by Herbert N. Casson.

A New Leadership in Cotton by Walker D. Hines

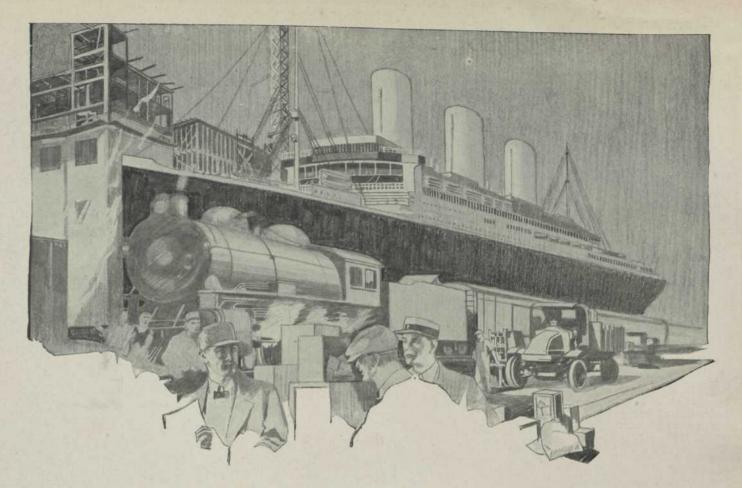
Dollars and Sense in Aviation. by William P. MacCracken, Jr.

What the Atom Means to Industry by Gerald Wendt

Map of Nation's Business, Page 46



Published at Washington by the Chamber of Commerce of the United States



Can You Count 41 Major Markets within 200 miles of your plant?



Study this map and you will see why the Port of Newark offers every marketing advantage of New York City location, at a fraction of the rental and operating cost for plants, branch offices or warehouses. New York is 30 minutes distant—Philadelphia about 90 miles—Boston and Baltimore within overnight motor haul.

ONE of the reasons why so many national enterprises—Sears—Roebuck and Company and Weyerhaeuser Forest Products Company among the more recent—have been attracted to the Port of Newark is the fact that it affords the most economical access to the best markets of the East. Forty-one of the 100 largest cities in America lie within 200 miles—overnight motor-hauling distance! 43,000,000 consumers—one third the national population—live within a radius of 500 miles, comprising the greatest concentration of buying power in the world!

Supplementing this strategic proximity to market are a number of other advantages that are giving Port of Newark manufacturers the coveted "edge" in this highly competitive period—unique transportation facilities, direct rail-to-ship connections, \$7,000,000 airport now under construction, reasonable land values, stable labor conditions, favorable climate, adequate financial resources and an unusual degree of community co-operation.

Why not let us give you the complete facts about the Port of Newark? Your inquiry will be treated confidentially and will place you under no obligation whatever. Write for interesting book "Port Newark," which contains vital information about this great development and its trading area.

THOS. L. RAYMOND—Mayor—Newark, New Jersey

The PORT of NEWARK

TRUSCON

SERVICE

OFFICES

ALTOONA, PA.

BOSTON, MASS.

BROOKLYN, N. Y

COLUMBUS, OHIO

DALLAS, TEX

DAYTON OHIO

DETROIT, MICH.

FORT WAYNE IND.

GREENSBORO, N. C.

INDIANAPOLIS, IND.

JACKSONVILLE FLA

LOUISVILLE, KY.

MADISON, WIS.

MILWAUKEE, WIS

NEW ORLEANS, LA.

NEW YORK, N. Y.

OMAHA, NEBR.

PITTSBURGH, PA

PROVIDENCE, R. I. ROCHESTER, N. Y. ROSWELL N. M.

ST. LOUIS, MO.

PEORIA ILL.

NEWARK, N. J.

HARRISBURG, PA.

TRUSCON BUILDING PRODUCTS

COMPLETE BUILDINGS FLAT ROOF TYPES PITCHED ROOF TYPES STRUCTURAL TRUSSES ERECTION

STEELDECK ROOFS

STEEL WINDOW PRODUCTS

DOUBLE-HUNG COUNTER-BALANCED-BASEMENT WINDOWS STEEL FRAMES

REINFORCING STEEL

ERECTION

COLUMN HOOPING FLORETYLES LOCKTYLE PARTE TO

METAL LATH PRODUCTS

A-METAL LATHS HY-RIB STUCCO MESH CORNER BEADS CHANNELS MORTAR BOXES PARTITIONS

STEEL JOISTS

P-G (PLATE GIRDER) TYPE O-T (OPEN-TRUSS) TYPE ACCESSORIES

ATRPLANE HANGAR

REINFORCED PAVEMENTS

WELDED STEEL FABRIC CONTRACTION JOINTS CURB BARS EDGE PROTECTORS STEEL ROAD FORMS

STEEL POLES

CROSS-ARMS

POLE LINE HARDWARE

SECONDARY RACKS SPECIAL TIES

BOXES AND PLATFORMS

FOUNDRY FLASKS

PRESSED STEEL PARTS

LABORATORY PRODUCTS

FLOOR HARDENERS CEMENT ROOFING THE











RAILROAD BLDGS

TRUSCON **BUILDING SERVICE**

A nation-wide organization giving practical information on the best methods of economical and fireproof construction for any type of building; the application of fabricated steel products to this construction at the lowest cost; the selection of complete units to assure the timely completion of the project. Truscon furnishes estimates and suggestions based on preliminary data; co-operates with architects and builders; employs and recommends the best talent for any particular structure.

> We invite you to call upon us for this service. It entails no obligation.

TRUSCON STEEL COMPANY, YOUNGSTOWN, OHIO Manufacturers and Engineers ESTABLISHED 1903













TRUSCON STEEL COMPANY YOUNGSTOWN, OHIO, U.S. A.

Please send me without obligation, literature, suggestions and further information about your building service. I am interested in a building to be used

size_____length____width_

Company_

Individual

Address NB 11-27 SEATTLE, WASH SOUTH BEND, IND

TULSA, OKLA

FOREIGN TRADE

THE TRUSCON

LIMITED WALKERVILLE, ONT Bag Factories

MINNEAPOLIS OMAHA

NEW ORLEANS SAN FRANCISCO

INDIANAPOLIS

ST. LOUIS

MEMPHIS KANSAS CITY SEATTLE

WINNIPEG

HOUSTON

BUFFALO

WICHITA

ST. LOUIS INDIANAPOLIS

BROOKLYN

Cotton Mills

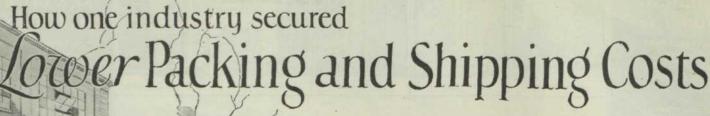
BEMIS, TENN.

Bleachery
INDIANAPOLIS

Paper Mill PEORIA

WARE SHOALS, S.C.

SINCE 1858, THE WORLD'S LARGEST MAKERS OF QUALITY BAGS



plus lasting good will

THE Bemis technical staff created a lasting economy of widespread benefit when it

showed soap manufacturers how to ship pulverized soap and chips to laundries in Bemis Bags.

The soap makers save in first cost, cost of packing, and tare weight by shipping in Bemis Bags. And in addition they gain the good will of the laundries, who, in turn, gain their customers' good will by converting the soap bags into ideal laundry bags.

Perhaps bags can do as much for you. To find out, just ship us by freight one unit of your product in its usual container. Our technical staff will apply itself to your problem and ship your product back to you in a Bemis Bag—or tell you frankly it can't be done. No obligation, of course.

BEMIS BRO. BAG CO.
Address: General Sales Offices, St. LOUIS, U. S. A.



Soap Chips shipped in BEMIS BAGS reach the laundry in perfect condition at a minimum of expense for container, freight and handling.



Bags are easily stowed away until their contents are used. After that they are usable for something other than kindling wood!



For they are washed to remove all soap chips—and the manufacturer's imprint—





And then turned over to the laundries' customers for a long life of usefulness as bags for the family wash!

COTTON - BURLAP - PAPER - PRINTED OR PLAIN



Southern California Offers Advantages to Industry

Mild climate
Good factory sites
Low building costs
Competent, contented labor
Largest concentrated local market
on Pacific Coast
Excellent transportation—rail and water
Central to raw materials
Strategic location for export
and
ABUNDANT ELECTRIC
POWER

To Provide You Cheap Abundant Power!

Factories — hundreds of them — are seeking locations in Southern California. In seven years, our customers' installations have increased from 500,000 to 1,500,000 horsepower.

The Goodrich and Firestone factories now under construction here are typical of this industrial progress.

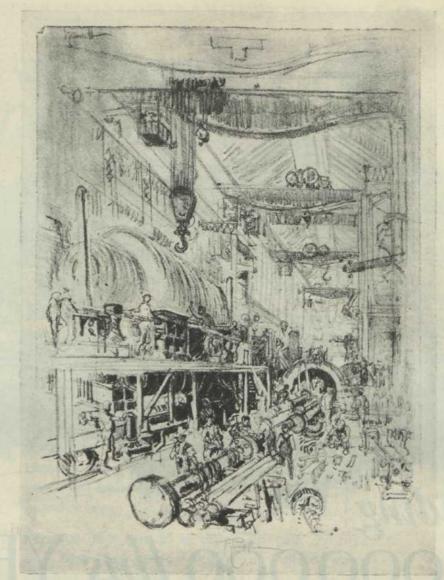
To provide an ample supply of electric power, this Company is spending \$42,000,000 in 1927 for new powerhouses, transmission lines, sub-stations and distribution facilities.

OWNED BY 115,000 STOCKHOLDERS

Southern California Edison Company

For complete information, address W. L. Frost, Gen. Commercial Mgr., 1000 Edison Bldg.,

LOS ANGELES, CALIFORNIA



"Making a Turbine Engine"

We are privileged to reproduce here one of a series of drawings of industrial subjects by the late Joseph Pennell, one of America's great artists. Courtesy of the J. B. Lippincott Co.

TO MANUFACTURERS OF QUALITY PRODUCTS

Your Uncommon Sense

SOME men naturally gamble in business. They carry a rabbit's foot and like to take long chances. They "buy cheap and hope for the best."

Common sense really is uncommon. Common sense does not trust to chance.

You make quality products for reasons which satisfy you and your customers.

Careful buyers who know the uncommon sense of quality have helped you to reach your present position. They have helped us to build the world's outstanding lubrication business.

Correct Lubrication Essential Many million people would sit in darkness tonight if the oils supplied by the Vacuum Oil Company to leading light and power stations failed to lubricate their turbines with scientific accuracy.

More than half of the world's large steam turbines are correctly lubricated with oils supplied by this Company.

In all industries where the need for reliable operation is para-



Lubricating Oils for Plant Lubrication mount, lubrication is receiving serious consideration.

More and more, this subject is engaging the attention of plant executives.

Precisely correct oils serve as faithful guardians against:

unexpected breakdowns;
 frictional losses which force up power costs;
 too-rapid wearing out of machinery.

When we undertake the correct lubrication of a plant we keep in touch with the operating personnel and, with their cooperation, watch lubrication efficiency.

Our oils and our services used by leading builders of machinery, and by manufacturers of quality products throughout the world, are at your command.

Vacuum Oil Company



PARADOXES in a month's news: W. Z. Foster's grip on Red party loosens . . and Soviet government increases its sugar output. Berlin brides object to tattered carpets in marriage office . . . and twenty-five American couples wed in the air. Briton wins Schneider cup at 281 miles per hour . . . and a turtle wins \$3,870 in Oklahoma race.

Sir Oliver Lodge calls ether the source of creation . . . and Sir Arthur Keith holds Darwinian theory unshaken. Bishop of Ripon wants ten-year pause in scientists' labors . . . and Dr. Galpin, Department of Agriculture, says science will solve rural problems. Robert Underwood Johnson decries slang in fiction . . . and Englishspeaking races gain in immigrant ranks.

New York foresees its greatest moving day . . . and six thousand truckmen strike. No-limit speed law is tried in Michigan ... and a New Rochelle messenger boy crosses the continent in thirty days. A Cornell professor finds a bush tribe that appreciates art . . . and Pierre du Pont builds an open-air theater.

Pigs drift west with spread of corn belt . and Virginia will mark main highways with tablets. Liberalism wanes in the Middle West . . . and discount rate cut troubles Chicago. Father Curran finds God left out of the public schools . . . and Minnesota investigators discover that one-fourth of college students cheat way to degrees.

Prince Carol and Princess Zita abdicate . and Tunney keeps his title. Seventy thousand blacksmiths are still at work despite increase of motor cars . . . and horse meat packers want lower freight rates. Dr. M. C. Hardin, Atlanta, says man is made of electric impulses . . . and Maine considers export of electric power.

Mayor Walker declares he is ashamed of the "one-half of one per cent American" ... and a monument to Jesse James is proposed. A. E. F. legionnaires are welcomed in Paris as peace envoys . . . and France announces she will stick to her tariff guns. New York apartment hotels put stop to cooking . . . and plan to tap earth for heat is advanced.

Doctor contends cigarette - smoking mothers increase infant mortality rate in the United States . . . and Americans start 1,000-acre tobacco farm in Canada. Michigan professor will study corrupt election 000 voters in 1928 is set by manufacturers' association. Bar Harbor doubts colored invasion . . . and Siam passes law to keep out "Reds." practices abroad . . . and goal of 36,000,-

MERE outsiders cannot be expected to know all that is in the heads and the purses of Iowa's farmers. But it is mighty hard to adjust reports of the record-breaking state fair crowds to any notion that

TABLE OF CONTENTS

THE SINS OF BUREAUCRACY	13
A COSTLY TRY AT SOCIALISM	15
DOLLARS AND SENSE IN AVIATION WILLIAM P. MACCRACKEN, JR.	18
BUSINESS TAKES A HAND IN TAXES	21
What the Atom Means to IndustryGerald Wendt	23
THE FACTORY HAS LEFT THE HOMEIRVING S. PAULL	26
A New Leadership in Cotton	28
Editorials	30
EARLY NEWSPAPER ADVERTISING	32
THE AUTO UNDER THE BIG TENTCHRIS BATCHELDER	34
Public Utilities Face Attack	38
FLOOD CONTROL, A NATIONAL TASKL. C. SPEERS	42
THE MAP OF THE NATION'S BUSINESSFRANK GREENE	46
Boneheads—And Proud of It!Wellington Brink	52
NEW NORTHWEST LAND VALUES	56
Fair Postage Rates, a Myth?Robert L. Barnes	66
REDUCING THE NATION'S BANK-ROLLWILLIAM ATHERTON DU PUY	70
Canada's National Chamber Meets	76
Money May Be the Last Thing Factories Need . James H. Collins	78
WHAT THE WORLD OF FINANCE TALKS OF	86
WHEN THE BRICK COMES BACKDONALD McGREGOR	94
ON GUARD AGAINST PETTY BLACKMAIL	98
"Prosperity But No Profits" Again	100
A CHAMBER TAKES HOLDB. B. Lovins	108
RECENT FEDERAL TRADE CASES	110
CHIPS FROM THE EDITOR'S WORK BENCH RAYMOND C. WILLOUGHBY	114
THE BALANCE IS WITH FRANCE	120
Business Views in Review	122
News of Organized Business	130
On the Business Bookshelf	138
GOVERNMENT AIDS TO BUSINESS	140
	143
THE HOTEL AS A BUSINESS GAUGE	148
HUMAN NATURE IN BUSINESSFred C. KELLY	151

Vol. 15

No. 12

NATION'S BUSINESS

Published Monthly by the Chamber of Commerce of the United States, Washington, D. C.

MERLE THORPE, Editor and Publisher

Managing Editor, WARREN BISHOP Director of Advertising, GUY SCRIVNER

Business Manager, J. B. WYCKOFF Circulation Managers, O. A. BROWN, L. F. HURLEY

Editorial Staff, Chester Leasure, Raymond Willoughby, Wm. Boyd Craig, Robert L. Barnes, Willard L. Hammer

GENERAL OFFICES: WASHINGTON, D. C.

Branch Offices

New York, Graybar Bldg. Detroit, General Motors Bldg. Chicago, Metropolitan Bldg. St. Louis, Chamber of Com. Bldg. Cleveland, Keith Bldg. Philadelphia, Chamber of Com. Bldg. San Francisco, Merchants Exchange Bldg. Pittsburgh, Chamber of Com. Bldg.

Subscription Rayes: Three years, \$7.50; one year, \$3.00; single copies, 25 cents.

As the official magazine of the National Chamber this publication carries authoritative notices and articles in regard to the activities of the Chamber; in all other respects the Chamber cannot be responsible for the contents thereof or for the opinions of writers to which expression is given.

American Exchange Irving Trust Company

NEW YORK

Statement of Condition, September 30, 1927

RESOURCES

Cash on Hand and Due from Banks	1	. \$97,582,637.35
Exchanges for Clearing House		. 119,991,369.42
Call Loans, Commercial Paper and Loans e	eligible i	for
Rediscount with Federal Reserve Bank		. 150,754,168.07
United States Obligations	T.	. 34,700,356.66
and it would be the		
Short Term Securities		
Loans due on demand and within 30 days	0.00	. 96,667,316.67
Loans due 30 to 90 days		. 58,982,396.87
Loans due 90 to 180 days		. 37,737,726.26
Loans due after 180 days		. 8,140,261.15
POR W. W. College		
Customers' Liability for Acceptances		
(anticipated \$2,126,326.00)		. 37,584,431.78
Bonds and Other Securities	7	. 10,690,191.26
New York City Mortgages		
Bank Buildings		. 3,544,397.45
		. 313441397.43
ages I made to the leading		\$702,318,541.15
LIABILITIES		
Liabilities	S	\$702,318,541.15
LIABILITIES Deposits	s	\$702,318,541.15 . \$549,401,637.29
Liabilities	s	\$702,318,541.15 . \$549,401,637.29
LIABILITIES Deposits	S	\$702,318,541.15 . \$549,401,637.29 . 46,550,023.05
Deposits	S	\$702,318,541.15 . \$549,401,637.29 . 46,550,023.05
Deposits	S	\$702,318,541.15 . \$549,401,637.29 . 46,550,023.05
LIABILITIES Deposits	S	\$702,318,541.15 . \$549,401,637.29 . 46,550,023.05 ate . 39,710,757.78
Deposits	S	\$702,318,541.15 . \$549,401,637.29 . 46,550,023.05 ate . 39,710,757.78
LIABILITIES Deposits	S	\$702,318,541.15 . \$549,401,637.29 . 46,550,023.05 ate . 39,710,757.78 . 1,217,718.74
LIABILITIES Deposits	S	\$702,318,541.15 . \$549,401,637.29 . 46,550,023.05 ate . 39,710,757.78 . 1,217,718.74 . 2,056,851.46 . 1,120,000.00
LIABILITIES Deposits	S Crea	\$702,318,541.15 . \$549,401,637.29 . 46,550,023.05 ate . 39,710,757.78 . 1,217,718.74 . 2,056,851.46 . 1,120,000.00 . 32,000,000.00
LIABILITIES Deposits	S	\$702,318,541.15 . \$549,401,637.29 . 46,550,023.05 ate . 39,710,757.78 . 1,217,718.74 . 2,056,851.46 . 1,120,000.00

the state's farm population is headed toward the poorhouse. During the ten days of the fair, the total attendance was 429,-051-20,688 above the best previous record.

Those farm people were out for a good time. That they had the ready cash to satisfy their interest in the various con-cessions and exhibits is borne out by reports of their generous patronage. When an address on farm relief can attract only 500 persons, and horse races and a band concert on the same day can draw 15,000 at 50 cents each, there is considerable reason for believing that the farmers and their families are weary of hearing that

they are hopelessly insolvent.

No, the solution of the problems that vex Iowa's agriculture is not in declamation. Nor is it so likely to be found in legislation as in business organization. Good management can be as soundly commended to the benefit of agriculture as it can to the profit of industry. Consider the Iowa farm warehouse law, for instance. This legislation two years ago was acclaimed as agricultural salvation. It has made little progress at getting out of the statute books and into use because of its cumbersome finance provisions. Surely the methods now operative could be simplified to good purpose. But that, of course, is a question that will require something more matter-of-fact than oratory.

VIRTUALLY every boy born in the United States in these days inherits the opportunity to earn at least \$50,000 and retire on a pension of \$1,000 a year or more. Such is the glittering promise that can be fulfilled with the practice of thrift, declares the National Thrift Committee of the Young Men's Christian Association. If the committee has the facts and figures to support its wide-spreading claim, and it says it has, it can do much to make financial independence seem as hallowed as national independence.

HERE are twelve pertinent facts to keep in mind when you have occasion to discuss the corporation income tax:

1. Last year American corporations, big and little, paid to the Federal Government \$1,-300,000,000—nearly one-third of the Government's total revenue.

2. Corporations, big and little, paid taxes, local, state and federal, equal to approximately two-thirds of the amount they paid

3. If you are a stockholder in a corporation, big or little, you paid 13½ per cent of your share of its net earnings in the form of a corporation income tax.

4. No distinction was made between the owner of \$500 worth of stock and the owner

of \$5,000,000 worth.

5. If you had some of your savings invested in the stock of corporations, big or little, you paid on the income from this source more than 21/2 times the rate you would have paid under the maximum normal income tax rate.

6. Individuals having small or moderate incomes of less than \$10,000 pay more than three times as much federal taxes on income received in the form of corporate dividends as they do on all the remainder of their income combined.

7. The majority of corporation stock is owned by individuals having \$12,000 or less income. The major portion of the benefits income. The major portion of the benefits resulting from a reduction of the corporate



O. H. Roth, President of the O. H. Roth Company, Cincinnati, says:

"Our new building—probably one of the most modern and complete automobile and truck painting shops in the United States—has more than 16,000 square feet of floor space, and is flooded with daylight through skylights. To maintain a constant temperature and keep out dust, the four large doors are equipped with Richards-Wilcox hardware, which we consider the best made.

"A good paint job requires that the temperature be held close to 72° and that dirt and dust be kept out of the wet paint. This is impossible with doors that do not fit, or are hard to open and close. Still, the doors must be opened frequently to let cars and trucks in and out. Three of our doors are sliding doors, $12x13\frac{1}{2}$ feet; one is a 4-fold door, $16x13\frac{1}{2}$

feet, to the washing rack; all three are heavy. But being hung on R-W ball-bearing trolleys, they are easily operated by one man; and they open to full width and close tight.

"Our selection of R-W equipment is based on 10 years' experience in our other building, where we have three sets of R-W hardware. These doors have never given the slightest trouble. We have never even had to tighten a bolt. They are still good for many more years.

"We are planning to partition off spray rooms, and R-W hardware is specified for the bi-parting doors.

"The expense of one spoiled paint job, including the labor of removing the finish and doing the job over, would pay for several sets of door hardware."

Let R-W Engineers make an analysis of your requirements in the matter of industrial doorways and conveying problems. This service places you under no obligation. You can obtain it by writing our nearest service branch.



New York · · · AURORA, ILLINOIS, U.S.A. · · · Chicago

Boston Philadelphia Cleveland Cincinnati Indianapolis St. Louis New Orleans Des Moines
Minneapolis Kansas City Los Angeles San Francisco Omaha Seattle Detroit

Montreal · RICHARDS - WILCOX CANADIAN CO., LTD., LONDON, ONT, · Winnipeg

At the 1927 Power Show Investigate



NDUSTRY today is intolerant of waste. It must be. The new competition weeds out businesses handicapped by avoidable losses. Here, then, is a condition that demands alertness in all departments, and engineers have quickly sensed the trend.

For much of the progress toward higher efficiency in power generation, transmission, measurement and application, in heating and ventilating, in power-using machinery and allied lines, we are indebted to the engineers who design and produce the modern machinery, materials, tools and instruments offered by alert manufacturers. Without a knowledge of these products and their uses, no engineer can do full justice to himself, to his employer or to his profession.

The greatest opportunity of the year to acquaint yourself fully and bring your knowledge of engineering products up to date is presented by the Sixth National Power Show at New York.

Four floors of Grand Central Palace will be occupied by exhibits. Specialists will be there solely to discuss your problems, answer your questions and show you what you want or need to see. A hundred thousand alert engineers from all over the world will attend!

You too! You will be glad you came. Bring an associate. The time is almost here. Note the dates now.

SIXTH NATIONAL EXPOSITION of POWER and MECHANICAL ENGINEERING

Including Heating and Ventilating Grand Central Palace, New York, December 5-10, 1927

Management International Exposition Co., largest Industrial exposition organization in the world @ 2041

income tax would thus accrue to small stock-

8. There are more stockholders than there are federal income taxpayers. Reduction of the corporate income tax rate will benefit more people than would a reduction in the personal income tax.

9. Do you think it good policy to levy a heavy tax upon the savings of the small stockholder merely because they are invested in a corporation?

10. In instances where corporations can shift some of the burden of this tax upon their net incomes, it is reflected in prices which affect the cost of living and buyers'

11. Is it wise to speed up business, big and little, and expand the sources of general revenue, or hamper business, big and little, by making it carry too heavy a tax load?

12. The Government had a surplus last year of over \$635,000,000. Tax rates can be reduced. Where do you think the reduction should be made?

AS A preliminary to celebrating the anniversary of our national independence it was right and proper that Edgar Watson Howe should be banqueted and acclaimed in New York by an admiring company of authors and journalists. For "Ed" Howe has been an active declaration of independence since he was first exposed to the fatal fascination of printer's ink in Kansas. In every bright flash of his wit is a reflection of the rich experience which began in a western newspaper office.

Printer's boy, tramp printer, newspaper publisher. Of formal education he had none. But books he read and remembered. The West of his youth was strongly touched with frontier colors and characters, and he did not fail to observe. It was fifty years ago that he and his brother founded the Globe in Atchison. Soon the freshness and originality of his writing spread his fame far beyond Kansas. His Globe got so prosperous that he had to retire. Affectionate fancy dubbed him "The Sunflower Philosopher" and the "Sage of Potato Hill."

Now, mellowed with meditation, he confines his judgments to his Monthly-"a journal of information and indignation." At home anywhere, and everywhere the friend of man, "Ed" Howe is the universal American. We salute him with the patriotic hope that he may continue to flourish, unexpurgated and uncensored.

THROUGH A. POLET, the Northwestern Chamber of Commerce at Nome remembers us with greetings on the inauguration of the "first commercial air mail service from Anchorage, Alaska, via Nenana, Ruby, Unalakleet, Candle to Nome." All

those communities in the Seward Penin-sula will be nearer for this facility, and it was right and proper for the citizens to celebrate their newest tie. But if the modern touch is pushing back the old North, there is still a piquant tang of frontier flavor in Nome's apt slogan, "Where air-

planes and dog teams meet."

WHEN the two post-office planes on the Cleveland-New York route brought their pouches safely to earth on the night of August 31, the Government went out of the air-mail business. Earlier it had turned over its other lines to private interests. Through its pioneer organization and maintenance of flying on cross-continent schedules, the Department convincingly demonstrated that an air-mail service was not only feasible as a technical achievement but also that such a service could be made commer-

cially profitable.

By the statement of the Postmaster General, fifteen privately owned lines are now providing air-mail services, and there are half a dozen others which will soon be in operation. Among them, he announces, is one between New York and Atlanta, one connecting Chicago and Cincinnati, and one that will link St. Louis and Memphis. Not all the contract lines have paid their operators-"some have not proven profitable and their operators have dropped out" but on the other hand, many of them are doing rather well, "finding the business, as they conduct it, highly profitable.'

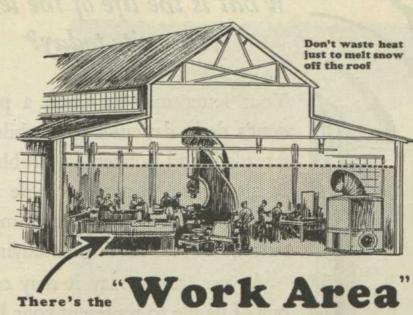
Something more than official optimism glows in Mr. New's avowal of his belief that "nearly all of them can be conducted not only with profit but with safety." And how far industry has gone in its enthusiasm for aviation is revealed in his appraisal that "today there are more companies making airplanes in the United States than there are manufacturing automobiles.'

What a pity that another branch of our Government which operates another arm of our transportation could not, and will not, it seems, find a way to go out of the shipping business.

THERE is more than arresting fact in General Motors' 'round-the-world visualization of its new Cadillac model by photo-radiograph. The public expects enterprise from a great corporation, and, assuredly, competition demands a vigilant alertness to the availability of new business tools. Yet the report that this concern linked up ten modern methods of communication to make a world-wide trade revelation is a timely reminder of the marvelous facilities and conveniences now at hand to accelerate the intricate mechanism of industry and commerce.

Telephone, telephoto, telegraph, cable, radio, photoradiogram, steamship, railroad, airplane, and motor car-all were used to project the lines of a new product to the farthest outposts of the corporation's export operations. Any arrangement to similar purpose that could save from one to two weeks over the usual time of transmission-as this plan did-would always delight the economical souls of good managers. But it is the distinguishing capacity to put many and various instrumentalities to a timely and effective focus that must eventually educate the general public to a reasoned appreciation of the essential mental "bigness" of "big business."

NTRODUCING Our Contributors: Walker D. Hines as President of the Cotton Textile Institute is well qualified to write of "A New Leadership in Cotton." Mr. Hines for many years was General Counsel of the Sante Fe Railway. After acting as Assistant Director General of the Railways for a year he was made Director General in 1919 and served until May, 1920. From June, 1920, to October, 1921, he was an arbiter under the peace treaties on questions of river ship-



There's where to Heatin

When you are planning to heat an industrial plant your first problem is the even distribution of warm air throughout the "work-area". Workmen cannot produce at full capacity if some are roasted while others shake with cold. Your second problem is to achieve that result with the least possible expense for installation and up-keep.

Either of these conditions can be met separately with comparative ease, but Skinner Brothers "Work-Area" Heating gives you a happy combination of

Effective Heat Distribution with Low Cost

The very simplicity of the method employed makes even distribution an easy matter. Skinner (Baetz Patent) Air Heaters blow a constant stream of heated air just above the heads of the workers. At the same time, the cooling air at the floor level is drawn back by fan suction into the heater and re-warmed. As it is thus pulled down to replace this lower air, the heated layer becomes a great warming blanket over the entire room.

The low first-cost and economical maintenance of Skinner "Work-Area" Heating is based upon the simplicity of the installation. No intricate system of pipes or ducts is required. The Skinner heating units come ready to set up and attach the steam and electric supply lines.

For over a third of a century Skinner Brothers have been developing and manufacturing heaters, ventilators, dryers and dust collectors. The success of the Skinner Air Heater is the result of this long engineering and building experience. A Skinner Engineer can save you money.

Skinner Bros.

"Engineered" Originators of the Unit Method of "Work Area" Heating

1400 S. Vandeventer, St. Louis, Mo. Factories at St. Louis and Elizabeth, N. J.

See phone book for address in:

Baltimore Buffalo Cleveland Indianapolis Philadelphia Scattle Boston Chicago Detroit Kansas City Pittsburgh Washington Representatives in Principal Cities



What is the life of the letter you write today?

Your letter may lie upon a president's desk, day after day, while he rereads it and ponders its problems. It may travel about the table at a board meeting, with a dozen important executives handling it, studying it.

A year from today it may come out of its file to represent your business once again.

Your letters are all speaking for you. Even a "five minute" letter establishes the character, the standing, of your business in the minds of everyone it reaches.

If your letters go out on Crane's Bond they are prepared for a long life and a serviceable one. Whenever they are referred to, they will give a dignified impression of importance.

Crane's Bond is made of 100% new white rags. It has remarkable strength and crispness and toughness.

May we send you portfolios of specimen letterheads which show how fine design and all rag paper will get a greater value from your

business stationery? Write for it now.

Crane's Bond

A 100% NEW WHITE RAG BUSINESS PAPER

CRANE & COMPANY · DALTON, MASS.

ping. Since then and up to the time of taking the Presidency of the Cotton Textile Institute he has been practicing law in New York City except for the summer of 1925 when he made a report to the League of Nations on Rhine and Danube shipping.

Herbert N. Casson lives just outside of London. He is editor and publisher of Factory Efficiency. He lived in the United States for many years and while here worked for a time on the New York World and Munsey's Magazine. He is the author of a number of books on business. His article in this month's magazine, "A Costly Try at Socialism" is an informative piece

whose moral is plain.
"Dollars and Sense in Aviation" by William P. MacCracken, Jr., Assistant Secretary of Commerce for Aeronautics, deals with the relation of aviation to business. Mr. MacCracken, a graduate of the University of Chicago, served from 1917 to 1919 in the Army Air Service. Since then he has practiced law, acted as Secretary of the American Bar Association and Chairman of its Committee on Aeronautics, as governor of the National Aeronautic Association, and has been connected with the National Air Transport Company.

Many of our readers will remember Gerald Wendt's piece in the August, 1926, issue of the magazine entitled "The Synthetic House of Tomorrow." In this issue Mr. Wendt writes of "What the Atom Means to Industry." Mr. Wendt was Research Chemist for the Standard Oil Company of Indiana and has done original and important work on the effect of extreme heat on metals. He is now Dean of the School of Chemistry of Penn State College.

Irving S. Paull is a business analyst. He organized the Domestic Commerce Di-vision of the Department of Commerce and was its chief until he became Secretary of the Joint Agricultural Inquiry Commission. He is now the President of the Institute of Carpet Manufacturers. His article "The Changing Map of Industry" which appeared in May, 1927, was widely quoted and discussed whe discusses the fact that "The Factory Heal Left the Home" that "The Factory Has Left the Home."

Merryle S. Rukeyser, who conducts the regular department, "What the World of Finance Talks Of," writes in this number "The Public Utilities Face Attack." He has been the financial editor of several New York papers and is now a teacher of financial journalism at Columbia University.

L. C. Speers is a member of the staff of the New York Times and has made a thorough study of flood conditions.

IN ONE of the industrial exhibitions held this fall in Grand Central Palace, New York, signs were posted asking exhibitors not to smoke.

A guard noticed a pretty girl smoking a cigarette as she rested on a divan in one of the show's many booths. She had her trim legs crossed in such a way that her knees were well in evidence.

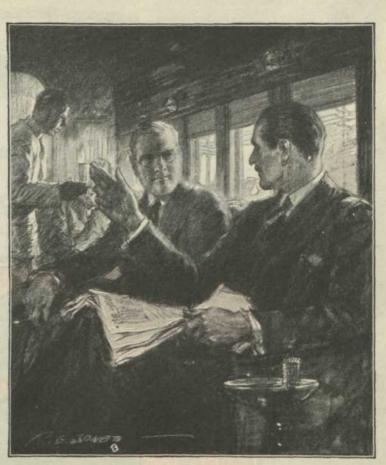
The guard reminded her that exhibitors were requested not to smoke.

"Oh, that's all right," she said, "I'm not an exhibitor."

"I'm not so sure of

that," replied the

you buy hand-to-mouth you'll have to know more about your business!"



"Don't misunderstand me, Elliott! I'm not criticizing hand-to-mouth buying.

"I'm for saving money just as much as you are. I want to get away from frozen capital and surplus stocks and all the rest of it. But don't be penny wise and pound foolish about it.

"If you want to buy in small lots for immediate requirements only, you've got to be on your toes all the time. A little misjudgment or a shipping delay can lose you more on one deal than hand-to-mouth buying can save you in a year.

"It's essential to know, every minute, every detail of your stock, your sales and price trends, styles, preferences and a dozen other things. The only way you can do it is to get your facts out in the open, staring you in the face every day on Acme Visible Records."

Every important fact shows up on Acme records in a way you can't miss-signalled in color, vivid, clear. Scarcely a business record exists that can't be more useful when put on Acme Visible equipment.

Many of the thousands of ways in which Acme safeguards business, make up the text of our new illustrated book "Profitable Business Control." You'll enjoy reading it. Send the coupon for your copy. Without obligation, of course.



ACME VISIBLE RECORDS

ACME CARD SYSTEM CO 116 South Michigan Avenue, Chicago Gentlemen:	
You may send me your book "Profitable Business Control" Please write me concerning your system for handling	You may send your nearest representative to see me
NAME	100 100 100 100 100 100 100 100 100 100
CITY	STATE



HIS new STANDARD Autographic Register, revolutionary in design, affords five outstanding advantages — Speed; Capacity; Desk Space; Natural Writing Position and Low Price.

Fits snugly into any desk and out of sight

As a contrast to the ordinary register which requires considerable desk space, the Desk Electric fits snugly beneath, out of sight, permitting natural writing position for the arm and leaving practically the entire desk top available for use. Loading of forms is as simple and speedy as refilling a machine gun and as many forms can be loaded at one time as the user desires.

This new STANDARD may be used in practically every system involving autographic registers. It operates automatically - electrically - and forms may be issued quickly by simply pulling a small lever switch.

Wherever carbon copies of records are essential, there are thousands of uses for this and other models of STANDARD Autographic Registers. Big business and small alike, of every type and description, depend on them to eliminate costly errors, speed up business motion, fix responsibility, lower overhead and provide vital facts to busy executives. As in other businesses, they will quickly pay for themselves in yours. Use the coupon below for complete information. No obligation—Write

THE STANDARD REGISTER CO., 259 Albany St., Dayton, Ohio



Left: The Super "A" Standard. Right: Style "S-C"
"S-C-P" Standard.



Important: STANDARD

Autographic Registers
may be used for either
roll or flat printing
and, regardless of the
type of form used or
the type of register,
the STANDARD

"Kant-Slip" pinwheel
feature makes it absolutely impossible for
additional copies of
any form (up to six,)
to get out of alignment
with the top sheet.
Theymust bethe same,
line for line, word for

Roll and Anyfold Systems for Autographic Registers and Billing Machines

THE STANDARD REGISTER COMPANY, 259 Albany St., Dayton, Ohio.

Without obligation. please tell me about the STANDARD Desk Electric and Standard Register Systems, and how they quickly pay for themselves in uses checked below:

alea Records

Production Orders

Express Receipts

Calay Summary Records

Shipping Orders

Calarge Sales Slips

City-County Systems lelivery Receipts

Telephone Orders

Packing Slips

Sales Records Invoices Bills of Lading Delivery Receipts

Extra large capacity-

Name.

With

Famous tandard

KANT-SLIP

_City-State

NATION'S BUSINESS

Vol. XV, No. 12 A Magazine for Business Men November, 1927

The Sins of Bureaucracy

BY MERLE THORPE

HERBERT N. CASSON, in the leading article in this number, calls the British Government's adventure in housebuilding an experiment in socialism.

If I had been writing the article I should probably have used the word "bureaucracy" instead of "socialism," for here we think of socialism as a faraway dream of division of property. But paternalism in government is a very real menace.

Whether it is called socialism, or paternalism, or bureaucracy, it all

amounts to the same thing.

When you take the individual incentive out of any job and pass it on to the desks of public office-holders it becomes a routine, lifeless, and costly activity.

Costly in more ways than money. If taxes were all, we, being rich, could stand the additional expense. But the sinful cost is the charge against individual endeavor, the right of each citizen to strive and stumble and rise again to strive for the recognition and reward that comes to the successful.

Individual reward for individual merit has made this country what it is today.

There is no squinting the fact that we are rapidly departing from this time-honored principle. How the rabid socialist of ten years ago must laugh behind his hand as he views the Federal Government today operating ships, running vast power projects and prescribing castor oil for babies.

Nor is this going on in the Federal Government alone. Here is a city bureaucracy setting up a municipal ice plant, fuel yard, slaughter house. Here is one establishing a street-paving and repair plant. Here is one playing with the telephone business, heating projects, municipal laundries.

Eighteen governors at Mackinac Island recently launched a grand program of paternalistic projects. Election time is near. The panacea-peddling politician is abroad in the land.

Henry Swift Ives brilliantly states the case when he says:

Government ownership is the product of loafing minds and loitering ambitions. It is the indolent offspring of a static mind. As a theory, it lacks imagination, originality, inspiration and romance. As an actuality, it is a stupid, dull, languorous method of carrying on the work of the world. It is the substitution of government deficits for private profits. It is a stubborn barrier to industrial progress. It is the Santa Claus idea of government, heralded by political sleighbell ringers. It has never created anything except jobs. It is destructive of growth of wealth and productive of growth of debt. If reform is needed in our industrial system, it must come from within.

Political government is not adapted to industrial government, and industrial government is not suited for political government. Business is conducted with a higher degree of fairness, equity and justice to those who are in it and with more appreciation of its responsibility to serve the public than any similar governmental enterprise. Industry is running itself better than any government is being run. The effect of state interference is to supplant order with confusion. Industry is two jumps ahead of the requirements of the people, while most government organizations are two jumps behind.

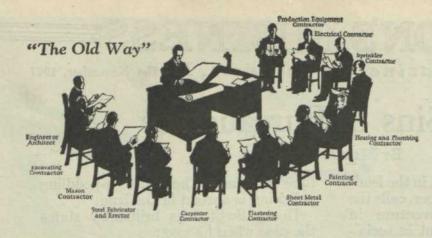
Mr. Ives gives the answer. "If reform is needed in our industrial system it must come from within."

Here is a challenge to business. The individual as such is weak, but through his group, his trade or community group, he can act.

He and his group will need intelligence and courage—understanding of the complex problems of our intricate industrial system and the courage to find a program and carry through. He can do this through teamwork; alone he is a soliloquizer.

And courage of another sort, too. When the proposition is made to let Washington do this for his industry—courage to stand up and say, "We'll do the job ourselves!"

Not the least of our paternalistic woes is due to the indifference of business itself.



"The New Way"



Yew Method Building Gets Results

OMBINING the services of architect, engineer, and builder, in one complete organization, The Austin Company has left behind the old, slow and expensive methods of building. Design, construction and equipment are all handled under one contract. No need to deal with a dozen different firms. The savings in time, money and bother have won the approval of business leaders from coast to coast.

Hundreds of leading concerns—including such names as General Electric, General Motors, U. S. Radiator, Westinghouse Electric, American Car and Foundry, U. S. Cast Iron Pipe, Williams Oilomatic—have endorsed the Austin Method of Undivided Responsibility with contracts and repeat contracts representing in some cases millions of dollars. For one of these companies Austin has been awarded more than 85 repeat contracts in the last 20 years.

Dealing with this one responsible organization, with offices all over the country, you have positive guarantees in advance covering

A—Total cost for the complete project.

B-Completion date, with bonus and penalty clause if desired.

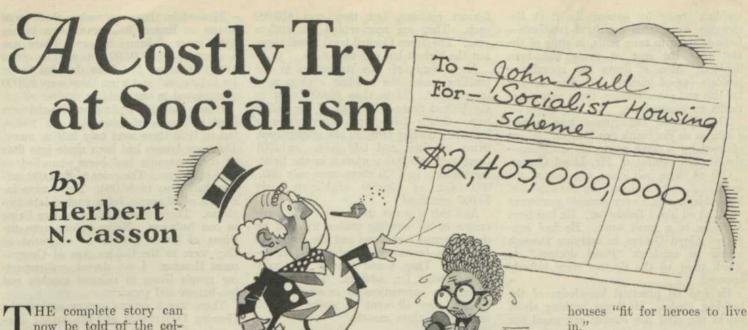
C-Quality of materials and workmanship.

For approximate costs and other information on any size or type of project, anywhere, wire, phone the nearest Austin office, or send the Memo below.

THE AUSTIN COMPANY, Engineers and Builders, Cleveland New York Chicago Philadelphia Detroit Cincinnati Pittsburgh St. Louis Seattle Portland The Austin Company of California: Los Angeles and San Francisco The Austin Company of Texas: Dallas

Complete Building Service

-	Memo to THE AUSTIN COMPANY, Cleveland — We are interested in
HZ	project containingsq. ft. Send me a personal copy o
K	"The Austin Book of Buildings." Individual
N	Firm



now be told of the collapse of the Government Housing Scheme in Great Britain-the most costly adventure in Socialism that has ever been tried in any country in Europe, outside of Russia.

In the first week in July, Mr. Neville Chamberlain, the head of the British Ministry of Health and Housing, announced that 217,000 houses had been built in Great Britain in the year ending March 31.

This was a record for house building in Great Britain. It was a triumph for the private builder against the dismal experiments of Bureaucracy. Very few of these houses

were built by Government; most were by private enterprise. The private builder has beaten the Government Housing Department and, in a sense, this was a sore confession on the part of the Government, an admission of failure.

The one great result of the Government's gigantic scheme to build houses is an enormous unproductive debt of \$2,405,000,000, which will have to be paid by British tax-payers during the next 60 years.

The British are a sporting people. They will try anything once. But never again will they try the experiment of allowing the Government to build their houses.

When the war came to an end in 1918, Mr. Lloyd George had a dream. He was at that time practically the Dictator of Great Britain. He was in a position to enable him to try the experiment of making his dreams come true.

The Government was then an unwieldy aggregation of Departments. The problem, from the point of view of Lloyd George and the Bureaucracy, was how to hold tight to these Departments and to keep them going in peace as

Lloyd George and his bureaucrats dreamed of a Government that would manage all trades and industries-that would control the forces of business as it had for four years been controlling the forces of war.

It would build houses-better and cheaper houses-

HERE is a vivid picture of a great experiment in semi-socialism, a picture drawn by one of England's best business journalists. It is a picture of what we might have done. We dabbled in government housing and in rent fixing as we dabbled in government railroading, but we never got as far as Great Britain. It is easy to say that conditions drove Great Britain into the experiment but the real lesson is one of Government as

We have played with semi-socialism in our shipping program and there are those who would go farther. Can we do better than Britain did in housing? -The Editor.

a business failure.

It would operate factories, abolish competition, lavish pensions, raise wages, lower prices and incidentally put taxation sky high.

As early as 1917, a Reconstruction Department had been started, to draw up a program of public ownership. This program, when it was completed, practically turned over the industries of the country to the mushroom Departments that had sprung up during the war.

It was Socialism, pure and simple. It was the creation of a vast bureaucratic Soviet. But at the time, the British people had grown accustomed to blind obedience to their

Government. They had been deprived of initiative and private rights for four years. And they were so pleased at the termination of the war that they did not realize that a new danger was now threatening them.

This dream of Mr. Lloyd George was, no doubt, a purely political scheme to subsidize voters and to keep his Government in power; but the British people did not discover this for several years.

Very few people, in fact, realized in 1918 that all the Government Departments were spending Departments. They had spent more than \$10,000,000,000 on war. Their sole efficiency had been in spending, not in creating new values. They were not competent to manage any commercial enterprise.

During the war, these Departments had erected buildings-shabby temporary buildings, the worst that had ever been built in Great Britain. Most of them have since been pulled down. They were mere sheds of cement sheets and corrugated iron, and they had cost a preposterous price. and sold for almost nothing. But the government did not learn that it was a poor builder and that only stern war necessity could justify its entrance into that field. But Government was in the saddle. It created a new Department of Housing, which was to build houses in the British Isles. In the early days of the war, it had paralyzed all the

building trades by passing the Rent Restriction Act. This penalized landlordsforbade them to raise rents, in spite of the fact that the cost of living had been doubled. Also, it drove the speculative builders out of business. During the war for this and other reasons, there were practically no houses built.

This Housing Department was as wild a scheme as the South Sea Bubble. It was planned by a small group of politiciansthe kitchen cabinet of Mr. Lloyd George.

One of these politicians was put at the head of it-Dr. Addison. In personal life, Dr. Addison was a very amiable gentleman -not at all like a Bolshevist. He had been a doctor in a small town. He had supported Lloyd George in carrying through a bill to establish "Panel doctors." to which most of the doctors were bitterly opposed.

He had no practical knowledge of the building trades. He knew nothing about bricks nor steel nor cement nor wood nor wage-workers nor architecture nor finance.

But he was put at the head of the Housing Department. He was the British Aladdin with the Wonderful Lamp. He was to rub this lamp and cause hundreds of thousands of houses to spring up. He was to give orders to all the architects and builders and carpenters and bricklayers and plumbers in the British Isles.

For a time, he did. He rubbed his lamp and to the surprise of everyone, the build-

ing trades suddenly collapsed.

All the intricate mechanism of the building industry was thrown into hopeless confusion. Everyone was tied hand and foot. A swarm of Government Inspectors sprang up and put a stop to anything that was not in accordance with the new edicts of Dr. Addison.

Many of these Inspectors were mere political hangers-on. They knew nothing about house building. Some of them were mendacious adventurers, who expected bribes and penalized those who refused to pay them.

Tied Up with Red Tape

"WE SHALL build 500,000 houses," said Dr. Addison. But the more orders he gave, the fewer were the houses. His bureaucrats invented hundreds of new restrictions. They tied the whole building industry from head to foot in red tape.

Then, in a flash, prices of materials went They doubled. For a time, they treb-This was in part because the Government's delays and cancellations and re-

strictions compelled higher prices.

As prices went up, the efficiency of the workers in the building trades went down. Bricklayers, who formerly laid 700 bricks a day, now laid only 300. What with their slacking and their higher wages, the cost per brick was increased 400 per cent. Dr. Addison issued all manner of edicts to stop this falling output, but none of them were

In 1920, at the height of the State Control period, only 16,000 houses were built, and at an enormous cost. These houses were the most costly that have ever been built in Great Britain or anywhere else.

I have recently seen two of these houses, in a suburb of London. They were only 5-room cottages, but they cost \$10,000 They are now rented for \$195 a year. The Town Council tried to sell them, but the highest bid was only \$700.

As a result of this stagnation in the building trades, the building workers were unemployed. More than 50,000 went to the United States-the pick of the skilled men. Others drifted into other trades or into the standing army of the unemployed, living on doles and odd jobs. In 1901 there were 828,000 workmen in the building trades. In 1920 there were only 360,-000. Out of 120,000 bricklayers, only 53,000 remained.

And this was not the worst. The trade unions in the building trades, irritated by the abnormal conditions and the swarm of inspectors, became very arbitrary and oppressive. They found that it was very easy to bully Dr. Addison. They refused to take in apprentices or ex-service men. Finally, they all went on strike and did nothing for three months.

A New Plan Built on Old

THE Housing Department then tried a new scheme. It tried to compromise with the private builders. Its original scheme had been a complete and disastrous failure. It simply could not build houses at all. So it offered subsidies and allowed private builders to put up houses. The only effect of the subsidies was still further to increase the cost of the houses. Subsidies meant interference and interference meant higher costs and fewer houses.

The Government was at the point of giving up its Housing Scheme, when it was thrown out of office and a Labor Government came in. It restored the Housing Scheme at once. It went further. It brought forward a new scheme to build 2,500,000 houses in 40 years at a cost of \$6,000,000,000. This was the most gigantic scheme of subsidization ever proposed by any government.

The new Housing Bill proposed to give a subsidy of \$2,400 per house. The Board of Trade was to have full power to investigate prices, wages and profits. There was to be a Grand Inquisition. If a builder overcharged his client or underpaid his workmen, he was to be fined \$500 for every offence and sent to jail for three months.

This bill was drawn up by Mr. John Wheatley, the Labor Minister of Housing. He was a Glasgow Socialist, whose own business, shortly before, had gone into bankruptcy. He was a publisher and knew nothing about building houses.

This bill was not passed. It was too much for even the patient English people to stand. The Labor Government remained in power for eight months, and

built no houses at all.

After the Labor Government fell, all manner of schemes were proposed. The Socialists demanded free houses for the unemployed. They started a "No Rent" campaign, which prevented any houses from being built in Scotland for two years.

Lord Eustace Percy, a Conservative peer, actually proposed to create a new Civil Service that would build houses. It was intended to take the place of all private builders. This scheme, happily, came to nothing.

Meanwhile, there was such a shortage of houses as Britain had never seen in her 2,000 years of island history. There was a shortage of 700,000, at a time when 1,000,000 houses had been declared "unfit for habitation" and when there were 80,000 unemployed in the building trades.

Before the war, 4 per cent of Londoners lived in houses of more than six rooms, but in 1920 there were only half as many. The large houses had been made into flats or the occupants had been compelled to take in lodgers. The price of a \$2,000 cottage had risen to \$6,000. There were instances of 20 people being packed into two rooms. There were families of five living in one bedroom. Never before were the slums of Great Britain as congested as they were in the Golden Age of Government Housing. I saw decent, self-respecting people living in railroad coaches and hen-houses and piggeries.

There was a general outcry against the Housing Department and Sir Arthur Boscawen, who was at the head of it, threw up his hands and said, "The only safe plan is to get back to private enterprise."

Lord Midleton voiced the opinion of the whole nation when he said, "We have had a flood of well-meaning but fruitless measures to hurry England by uneconomic means into Paradise but we now find that those paths lead elsewhere."

During the State Control period the Government built 176,000 houses at a cost of \$750,000,000. The present value of those houses is less than \$250,000,000. Costs had been trebled and the normal production of houses had decreased 50 per

Including subsidies, the total cost of this wild experiment, during the next 60 years, will be \$2,405,000,000. In fact, the cost will be much greater than this, because of the demoralization of the building trades and the loss of skilled workers.

In 1922 the Housing Scheme collapsed like a house of cards. The Housing Department was broken up and merged in

the Health Department.

Lloyd George was in power at the time, but for some unknown reason he had changed his mind. He had surrounded himself with a new group of advisers. He had vielded to the inexorable logic of facts and figures. He had learned that a government cannot build houses.

A Cabinet Disbanded

DR. ADDISON was ousted from the Cabinet. He is now living in retirement and forgotten. Sir Auckland Geddes was made Ambassador to the United States. He had been the head of the Reconstruction Department, which pushed Britain into its policy of paternalism. He was a man of no practical experience in commercial life. He had been a Canadian professor.

The period of State Control came to an end. One scheme after another was flung into the dust-bin. The Bureaucrats were

routed, horse, foot and artillery.

Then came a building boom. first time in eight years the private builders were set free. The building trades had been like a river that had been dammed up and suddenly liberated.

In the first year more than \$300 -

000,000 was spent in repairs and extensions and the building of new houses. To the surprise of everyone, there was a sudden drop of 50 per cent in prices. All prices of building materials fell at once. This is a fact that none of the bureaucrats could understand. It was proved that the greater the subsidy, the greater the cost.

At first, there was a shortage of materials. These were imported from Belgium and Germany until the British manufacturers could reestablish their plants. The British brickyards and the tile works and

cement works had been lying dormant for eight years. Many had closed down.

enthusiasm An for building sprang up all over Great Britain. There was a big Town Planning Exhibition in Manchester and an Ideal Homes Exhibition in London. Once more, the architects were busy. Tens of thousands of men were taken into the building trades. The slacking ceased. The bricklayers began to lay 700 bricks a day. All this came about because private builders were let alone.

In 1925 the sales of builders' merchants rose to \$250,000,000 — a large figure for Great Britain. Private firms now began to build houses for their employes. Cadbury's. for instance, built 1,500 houses and sold them to their employes at an average cost of \$1,-200. They were better houses than the Government

had built for \$5,000. In 1924, 121,000 houses were built. In 1925, 159,000 houses. In 1926, 217,000 houses. Almost all of these were built by private enterprise.

During the last 12 years, there have been three distinct periods in the building industry—

(1) War Period. There was practically no building at all, except of temporary structures for military purposes.

(2) State Control Period. A small number of houses were built at an enormous cost.

(3) Private Enterprise Period. All previous records in house building were broken, and the costs were brought down to normal.

During the past four years, there was a boom, too, in the use of cement. Although Portland cement was first made in England by Joseph Aspdin in 1824, there had always been a prejudice against it. It was said to be cold, ugly and liable to be injured by frost. Architects set their faces against it.

But in 1923 the great buildings of the Wembley Exhibition were built of cement. They were shapely and artistic and cheap. They opened the eyes of the English people to the possibilities of concrete.

In 1923 the output of British cement rose to 2,700,000 tons. It is now being housed one-fifth of the people of Great Britain in homes of their own. They have done this without a cent of subsidy and without any government aid of any kind. They are the most effective instances of thrift and organized self-help in Great Britain.

They are managed very efficiently. They do not build houses. They only lend. They lend up to 80 per cent of the value of the house. A mechanic of good character, who has saved \$500, can borrow \$2,000 on easy terms. And the cost of management is only

three-fifths of 1 per cent a year.

The oldest of these societies is the Greenwich Society in London, which has been running for 120 years. It now has 45,000 members.

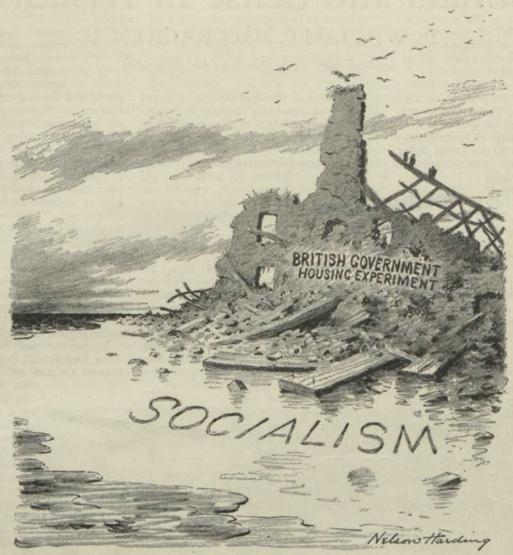
Generally, these societies have been very solid and efficient. There have been a few bubbles and smashes. But there has been no big smash since the "Liberator Society" went down in 1892, in a \$35,000,000 crash. As Lord Emmot once said-"they constitute a great thrift organization which no form of socialism can ever destroy."
Their ideal is

that Great Britain shall have as many house-owners as the United States. At the last Annual Conference, one of the delegates said: "In America, 45 per cent of all the families own their own homes. are still far short of that in Great Britain," he said, "but we are hoping to reach it in a few years."

The story of the collapse of the State Control Bubble in the British building trades remains an object lesson to all the governments and bureaucracies of the world, to teach them to let industrial and commercial affairs alone.

There is no longer any need to keep rents down by law. A cottage with living-room, kitchen and three bedrooms, with drains and fences, can now be built for \$2,000, much less than half of what it would have cost during the period of State Control.

Private enterprise has taken away the housing industry from the Government, and has developed it into a prosperity such as it has never seen. It will be a good many generations before any British Government ever again attempts to build houses.



BUILT ON SAND

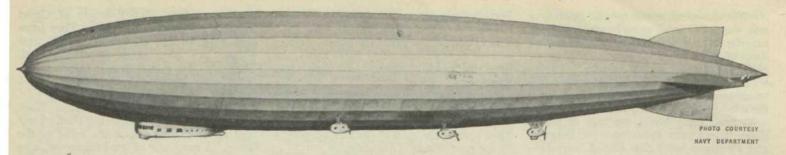
used freely in all parts of Great Britain.

There has been a boom, also, in British Building Societies, since the collapse of State Control. There are now 550,000 depositors in these societies and more than 1,000,000 borrowers. Depositors receive 4 to 5 per cent and borrowers pay 5 to 7 per cent.

The present membership of the societies is 1,216,730. Their revenue was \$455,000,000 last year. The amount loaned to house-buyers was \$250,000,000. Their reserves are \$50,000,000 and their total assets are \$950,000,000.

In the last 60 years these societies have enabled the building of 2,200,000 houses, all owned by the occupants. The present value of these houses is \$6,500,000,000

In a word, these building societies have



Dollars and Sense in Aviation

A United States is passing through the transition period between the highly speculative and the conservative fields

of investment. The progress of aviation may be divided into three phases—prewar, war, and post-war periods.

Each of them has been characterized by distinct developments in the art of flying. Outside of governmental appropriations the

the financial outlays have been made almost entirely by enthusiasts who did not expect dividends. This condition has been rapidly changing in the last few months. The first phase began in 1903, when the Wright brothers

made their first flight, and lasted until the beginning of the World War in 1914. The manufacture of aircraft during this period was carried on primarily by inventors on a small scale of production. The success or failure of the enterprise depended almost entirely on the skill of the inventor.

Their product was sold either to Government for military operations or to exhibition flyers who appeared in connection with air meetings at state fairs and similar gatherings, giving exhibitions and carrying passengers at rates which would now be considered exorbitant.

With the outbreak of the World War and the utilization of aircraft as a military weapon, its manufacture passed from the control of the inventors into the hands of production experts. The designer and the inventor still had an important place in the picture but the essential requirement of our military forces was for production.

Civilian flying in this country increased somewhat until our entry into the war, when it almost entirely stopped.

At the close of the war there was a vast surplus of aeronautical material

in the hands of the Government which could not possibly be used by peace-time defense organizations until it had deteriorated to such an extent

as to be unfit for ser-vice and also until it had become obsolete by reason of the advancement of the science of aeronautical engineering and design. The result was that the Government disposed of a large part of this war surplus at a price which placed airplanes within the reach of almost anyone desiring to fly.

WIDE WORLD PHOTOS

A large number of war-trained pilots ac-

IR TRANSPORT in the United States is passing By WILLIAM P. MACCRACKEN, Jr. creased, in the Government and outside, and new organizations in

Assistant Secretary of Commerce for Aeronautics

quired some of this material and engaged in what is commonly known as "barn-storming" operations. These consisted in storming" operations. flying from place to place, arranging with a farmer for the use of a pasture from which to carry passengers, putting on exhi-

bitions for local fairs, old home week celebrations, and the like, and occasionally instructing students in

Coincident with this there grew up the "fixed base operator." He differed from his

"barnstorming" brother primarily in the fact that he maintained permanent headquarters in some city where he conducted a so-called aviation school, dealt in the sale of war surplus planes and parts therefor, and in most instances did some aerial photographing and aerial advertising.

Some of the "barnstormers" graduated

into the fixed base operator class, and, likewise, some of the "fixed base" operators found that their choice of location was not of the best and took to barnstorming. It was a case

of the survival of the fittest, but on the whole the percentage of failures was much greater among the "barnstormers" than among the "fixed base" operators, and today we find a good many very creditable organizations that have survived this trying period and will form a worth-while group in our commercial aeronautical develop-

With the signing of the armistice the demands for new government air equipment ceased and production organizations

were disbanded. In many instances profits on war contracts were wholly dissipated by organizations which attempted to hold together their engineering staffs

and a nucleus of skilled workmen.

There was no civilian market for new production machines in competition with the war surplus and the demands for government use were seriously curtailed. There resulted a period of depression in the aeronautical industry from which we are just emerging. But gradually the demands for new and better aircraft in-

the industry have been built up around the inventor and designer. Quantity orders were

scarce and the real competition was in design rather than in price, although, as in all government contracting, competitive bidding played a large part and presented a serious problem.

In addition to the manufacturers selling to the Government some small organizations came into being which made a business of reconditioning surplus planes for civilian use. These organizations gradually developed their own design and engineering forces with the result that there are more manufacturing concerns in the air-eraft industry today whose entire output is for civilian use than there are manufacturing for the military services. Not only do they exceed in numbers, but their total output exceeds the number of planes manufactured for the army and navy.

During the post-war period the Post-office Department built up the transcontinental air mail route from New York to

San Francisco, and with the advent of night flying as a regular part of the service on July 1, 1924, commercial aviation was first brought to the attention of the business man in

the form of air mail.

In this three-year period the air mail service has grown from a system of less than three thousand miles in length to approximately eight thousand now, and it will soon reach ten thousand miles. During the first year of night flying the Postoffice Department carried 232,513 pounds of air mail. During the last fiscal year, which ended June 30, 1927, the total poundage was 559,625, which was an increase of 205,984 pounds over the total of 353,641 for the fiscal year 1926; and during the month of August approximately 75,000 pounds were carried.

While this growth has been remarkable. it has been steady and there is every indi-cation that it will continue at a satisfactory rate. When the new route from New York to Atlanta and New Orleans is opened it will afford an opportunity for much greater business because it will connect on one line five of the twelve cities of the country which have Federal Reserve Banks—Boston, New York, Philadelphia, Richmond, and Atlanta. On September 1 the Government finally withdrew from the operation of air mail lines and the entire





system is now in the hands of private contractors. At the present time there are some thirteen air mail contractors in operation and about one-third of them are earning at least a reasonable return on their investment, while all of them would be able to do so if they could average from 75 to 80 per cent of capacity loads.

In response to an apparent public demand for the service the American Railway Express Company on September 1 also inaugurated an aerial express service over 5,000 miles between the principal industrial sections of the United States, furnishing additional opportunities of business for the air mail contractors. And passengers are being carried over approximately the same mileage on the mail routes.

Those who have heretofore entered the field of both the industry and of operations may be divided into two classes:

(1) the man of means who was interested in aviation as a new adventure and who could afford, and was willing, to risk a portion of his capital in what he believed to be a highly speculative, but equally fascinating, undertaking; (2) those enthusiasts who, because of their love of aeronautics,

were willing to risk their capital and their lives in pioneering this new method of transportation.

Today, however, a new group appears on the horizon, viz., the invest-

ment bankers. The operations of some of the air mail contractors and of some of the manufacturers have been sufficiently successful to attract the business men who sought new fields in which to invest capital.

One of the air mail contractors has refinanced his line with a group of investment bankers who have been handling traction properties, bus lines and other pub-

lic utilities. While the securities have not been offered to the public in general, the financing has been in accordance with methods generally followed by investment bankers in dealing with public service corporations, and other lines are being investigated by other financial houses with the same idea in mind.

It is also interesting to note that the railroads, through their connection with the American Railway Express Company, have become somewhat closely allied, with the development of commercial air transportation.

The service which the express company is able to render through its many contacts with the shippers is analogous to that which the railroads themselves could render in the development of aerial passenger service in dealing with the traveling public. While no definite steps have been taken along this line investigations and inquiries by railroad executives would indicate that there is a distinct possibility that in the near future combined air and rail passenger service will be a reality

and not a theory.

There has developed from the activities of the "fixed base" operators what is known as aerial service.

This includes, in addition to sight-seeing rides and instruction, aerial photography and surveying, advertising, taxi service, forest fire patrol, and pest extermination, both in protecting crops and communities from insects. The extent of these activities is difficult to estimate but they undoubtedly exceed the estimates of many who are closely connected with aeronautics.

The way in which express companies will render pick-up and delivery service illustrates how aviation is becoming a part of our industrial life. Take, for example, the

> line operating between Salt Lake City and Los Angeles. The operators would find it very expensive to maintain traffic solicitors all along the transcontinental route

and its various feeders. Yet all of these cities are now served by the American Railway Express Company and very little expense is involved in bringing to the attention of their patrons the facts pertaining to the aerial express service offered by this particular line in conjunction with the connecting air lines.

Furthermore, shippers of express matter

are in the habit of dealing with the express companies, and it will be much easier for them to form the habit of using air express if in doing so they can deal with the same organization they have patronized for many years.

When it comes to the analogous service to be rendered by the railroads to the traveling public such cooperation becomes even

more important because very often it will be necessary to work out a schedule of connections between trains and planes, and also there will be times when,

because of delays in either service, it will be necessary for the connecting carrier to delay its departure in order that the passenger may make the connection.

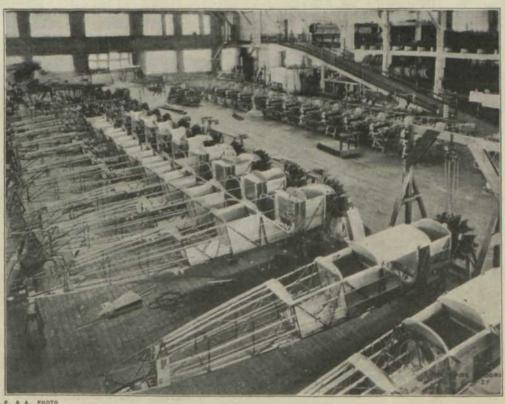
Air travel will occasionally be made impossible by weather conditions, in which event it will greatly accommodate the traveling public, if, instead of leaving the train at the station and learning at the airport that the planes would not operate, the passengers may have the information while on board the train. The journey could then be continued by rail and loss of time because of an attempt to fly would be avoided by this sort of combination of the two services.

The increase of air lines and of air traffic, the inability of the industry to supply the demands that are being made for civilian aircraft, and the enthusiasm of practically every community for the establishment and development of airports indicate quite clearly that the United States, the nation that exceeds the world in rail and highway transportation, will also lead in air transportation.

Aviation is expanding in every direction on the broad foundation that has been laid for its growth in this country, and

there is being established a real public demand for its service in many ways of practical importance. In connection with the development of the activities of manufacturers and operators will come the specialists in aeronautical insurance, finance, advertising, law, and other lines, as well as the airport engineers and architects.

Business men in commercial centers have tasted the good results from quickened communication and are coming to look for the letter that was posted the night before in distant points of the land, while the public generally is rapidly discovering that flying offers services not realized before.



Aviation has been developed by enthusiasts and Government. Now that the public is learning its value, it is growing commercially. Photo shows the assembly room of the Boeing airplane factory at Seattle



The Heart of Cleveland
An Etching by Anton Schutz

ANTON SCHUTZ, from his home in Munich, saw American skyscrapers and the picturesque region of Lower New York in the work of Joseph Pennell. He came to America, met Pennell, became his pupil and later assistant. Now he is filling the place in industrial etching that was his teacher's.

Business Takes a Hand in Taxes

Here's what the business men of Cleveland are doing to coordinate the financial policies and budgets of its three taxing authorities

THE BUSINESS man is the paymaster of government. Through his hands passes by odds the larger portion of the money required for the support of the processes and paraphernalia of government—national, state and local.

This does not mean that business must insist on public penuriousness. Without spending there can be no expansion or progress, either in business or in government.

Intelligence, not niggardliness, is the proper yardstick for the measurement and appraisal of those public enterprises that involve the spending of money to be raised

by tax levy or bond issue. This and an inflexible insistence that the public get a dollar's full value for every dollar that its government spends.

But can the business man do anything about taxes, other than let out a yell at the total at the bottom of the tax bill and reach for his check book and pay the bill?

If all the tax functions of government were centralized in one agency, the task of keeping an eye on its activities would be simplified, but such is not the case.

There's the federal tax gatherer. Then there's the state, the city, the county and the school district as well as many other special taxing authorities created to meet special local problems and situations.

All these have the "gimmes." But with all that, here's what business is doing about it

in the city of Cleveland, county of Cuyahoga, in the sovereign state of Ohio, mother of Presidents.

In population and taxable wealth the city of Cleveland is by odds the major part of Cuyahoga County. The valuation of its taxable property is in round numbers two billions.

From this two billions, the county must get the most of its sinews, and the municipality must supply the entire financial needs of a flourishing, progressive city—a city with municipal problems like unto those of other cities in the million and over class, together with local problems peculiarly its own.

Too Many Hands in the Bag

MOREOVER, a school district whose bounds are approximately coextensive with the municipality must get its funds from this same source.

Here's a bag of two billions with three taxing hands reaching into it to supply their needs. Each hand is independent of the other, and each is free to grasp at will save only as restrained by the laws of

By CHESTER LEASURE

the state of Ohio limiting both tax levies and bond issues.

It is beside the present mark to go into a detailed recital of these restraints fixed by the state legislature and applicable to all municipalities and tax levying and collecting units within the state of Ohio. Suffice it to say that such limits are prescribed, but within the limits so defined these three taxing agencies—the county, the city and the school district—were free

WHAT can business do about taxes?
Something, everyone agrees, should be done about them.

Mr. Leasure here points out what business is doing about them in Cleveland in a unique cooperation between business and the constituted taxing authorities. Last month he told of similar efforts in Indianapolis. Some time ago, in Nation's Business, Johnson Heywood related the experience of Baltimore.

Business in these cities is not advocating penuriousness. It asks for an orderly financial program one that takes into consideration the needs of the community. In a word, it insists on this formula in relation to a given proposal:

Is it needed now? Can we afford it?

Are we getting a dollar's value for our tax dollar?

to go the limit in dipping into this two billions of taxable wealth of the city of Cleveland, the property of its citizens.

To Coordinate Taxing Bodies

AT LEAST such was the case until three years ago when John D. Marshall, a lawyer, and a member of the city council, its president and by virtue thereof mayor of the city under the terms of Cleveland's city manager form of government, conceived an idea to coordinate the activities of these three independent taxing and spending agencies.

He proposed to centralize these activities so that each taxing unit might know what the other did, and to provide a method of intelligent priorities in bond issues for projected public improvements. To be sure, except in certain definitely and narrowly prescribed limits decreed by the state law, each of the three independent taxing units must present its bond proposals to a vote of the people. But this did not coordinate such activities as Mr. Marshall deemed advisable if the development of the community was to be

mapped out according to a definite formula—a formula looking with intelligence and foresight to future needs; a formula, moreover, contemplating a concerted design toward a common end by the three separate units of the local government.

With respect to a given bond proposal, the people could but say yes or no. They were not given the chance to see

They were not given the chance to see a particular project for which a given bond issue was proposed in relation to a general scheme of community development. They were given, rather, a picture of civic

needs in small segments like the pieces of a jig-saw puzzle and not a comprehensive panorama of the whole.

Advisory Board on Taxes

MAYOR MARSHALL proposed a citizens' advisory board to pass upon all improvement projects necessitating bond issues in advance of their submission to the public for approval or rejection.

His idea was to create a fiscal jury of men of weight in the community—a jury that should say whether the immediate as well as the future interests of the community would best be served during a given fiscal year by proposing this bond issue for new school buildings, or that bond issue for the construction of a viaduct to simplify the city's growing traffic problem or still another bond issue to amplify the city's lake

front, or a new park project or what-not, irrespective of whether the particular project fell within the province of the commissioners of Cuyahoga County, or the city council of Cleveland, or the Cleveland school board.

The immediate and future welfare of the community, according to the plan proposed by Mr. Marshall, was to be the criterion of judgment rather than the ambitions of the three taxing units.

The Idea Caught On

MR. MARSHALL discussed the idea with a number of citizens and men of affairs of the community. It caught on. Thus encouraged, Mr. Marshall proposed a resolution in the city council providing that—

the mayor be authorized and directed to invite the board of education and the board of county commissioners each to appoint three citizens, who shall, with three citizens to be appointed by the mayor, constitute a citizens' advisory committee to study and recommend a general public improvement program and policy for the development of

Cleveland, covering such periods as they may deem advisable. . . . The members appointed . . . shall have power to increase the membership of the committee to not more than fifteen and vacancies shall be filled by the remaining members. The committee shall continue its work indefinitely, and shall from time to time make such recommendations and formulate such programs as in its judgment should be adopted by the community, and shall take such measures as will best promote the fulfillment of such program and policy.

Official Data for Committee

TO AID and facilitate the advisers the resolution provided that

The mayor, the committee on appropriation and finance, the city manager, and the directors of the several departments shall make available to the aforesaid committee all information and data required by it in regard to the needs and projects of the city in the nature of public improvements, and shall present to such committee all considerations bearing upon the relative urgency and importance of all such projects, and shall communicate their views in such matters to the committee.

The city council passed the resolution. But the idea had yet two-thirds of its journey to go. It must be sold to the Commission-

ers of Cuyahoga County and to the members of the Cleveland Board of Education.

As authorized by the resolution, Mayor Marshall presented the plan

to these other units of the community gov-

Omitting the saga of the negotiations, suffice it to say that both the county board and the school board ratified the plan. Thus each of the three independent taxing and bonding units voluntarily accepted an agency to coordinate community projects in harmony with an orderly, forward-looking scheme of community development. The agency thus created, to be sure, had no authority to enforce its decrees. Its function was and is solely advisory, but each of the taxing units, by adopting the resolution and naming representatives on the advisory board, agreed to hearken unto its admonitions and advice in respect of improvement projects involving the issuing of bonds to be paid by the citizens of Cleveland.

Then came the business of naming members of the advisory board. No small task. The success of the plan depended upon the courage and intelligence of the board and the degree of importance which its members were disposed to assign to its function and the measure of downright hard work members were willing to put into it.

No Gauds, No Emoluments

MEMBERSHIP on the board brought no kudos, no public acclaim, no emolument nor gauds of office—nothing but work.

How well the preliminary work of preparation for the plan had been done and the degree of public interest enlisted in its behalf is indicated in the character and caliber of the men who agreed to serve.

The county commissioners named Paul

Howland, a lawyer and former Member of Congress; Richard F. Grant, vice-president

Howland, a lawyer and former Member of Congress; Richard F. Grant, vice-president of the M. A. Hanna Company and former president of the Chamber of Commerce of the United States; and I. F. Freiberger, vice-president of the Cleveland Trust Company.

The mayor named C. E. Sullivan, president of the Central National Bank of Cleveland; Thomas Coughlin, president of the Morris Plan Bank and a former director of finance of the city of Cleveland; and A. H. Seibig, president of the United Bank.

The board of education named G. B. Siddall, a lawyer; Jay Iglauer, a department store executive; and O. J. Horn, legal counsel of the Brotherhood of Locomotive Engineers.

The members thus appointed by the three units of the local government, as authorized by the resolution, named two others: W. G. Lee, president of the Brotherhood of Railway Trainmen, and L. H. Wain, a realtor. Mr. Wain later resigned—the sole resignation from the board in three years—and C. A. Witzel, another realtor, was named in his stead.

The board thus represents a cross-section of the Cleveland community—financiers, industrialists, labor leaders, merchants and business men.

For three years this board has passed upon the relative importance and immediate desirability of bond issues for improvement projects. It has weathered two public elections, and the idea prevails with the moral authority of the advisory board unimpaired.

Board's Advice Well Regarded

BUT ONCE has its recommendation that a specific bond project be deferred been overruled.

That was a project that had gotten so far under way at the time of the preliminary organization of the advisory board that it could not be held in check without embarrassing complications all around. So it really did not amount to a repudiation of the board's recommendation.

The board holds hearings on all bond projects. The widest latitude is given both to proponents and objectors in presenting arguments for or

against a specific proposal. Once the case is heard the board makes up its mind and announces its decision.

If the decision is favorable, the project is put before the people for ratification. If the board's opinion is adverse, the project—

with the exception noted—is withdrawn to await its turn for future consideration.

Proposal

Bond oposal

What has been the effect on the tax rate? Briefly stated, the year before the advisory board was created the Cleveland tax rate was 2.49.

The first year the board was in function the rate was 2.46.

For the last year of the board's activities, the rate was 2.41.

Economy, Not Niggardliness

GOING down. Yet, be it understood, this advisory board is not setting out to reduce the tax rate willy-nilly and regardless of the community's interests.

It is not a cheese-paring, penny-pinching board.

Its purpose is to do for Cleveland the things that, in its judgment, Cleveland most needs when it needs them most, and to get them with as low a tax rate as may be. And that's pretty shrewd common sense in civic affairs, when all's said.

What the Atom Means to Industry

HAVE you made the acquaintance of the atom? You've heard of it, of course, but probably you've been waiting for a professor to introduce you

some time when time hangs heavy. That's a nice, gentlemanly attitude to take, friendly and Christian and all that, but hardly businesslike. Why insist on formalities with this newcomer who is going into business in countless lines, from radio to life insurance, and who is one of the primary factors in the new competition?

You may not like its mysterious appearance nor the highbrow company it keeps, but it has the golden touch and has good prospects of obtaining a controlling interest in the future of American business. Better to have it with you than against you. The evidence on that point is the bulk of my story.

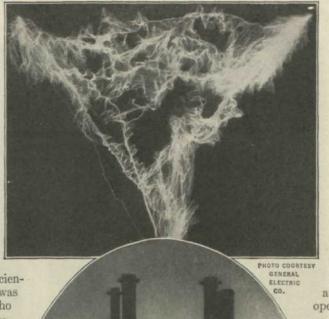
First of all, let me introduce the atom to you. Like the Hebrew Messiah, it has been a legend among scientists for centuries. Its first prophet was the Greek philosopher Democritus, who dreamed about atoms in the fifth century B. C. Its herald was John Dalton, an English Quaker of a century ago. And within the present century it became a reality to the professors of chemistry and of physics. Nobody cared much because in all ages the world at large has not bothered much about the profes-

There are industries, however, that maintain research laboratories, and one of the primary functions of such a laboratory is to keep an eye on what happens in the universities. Their men encountered the atom not long since.

A year ago one of the distinguished sessions of the Institute of Politics at Williamstown listened to a professor speak on the structure of the atom. It was a symptom. "What earthly interest can politicians and statesmen have in a subject like that?" was a question on many tongues. The interest was real and it was decidedly earthly, for inside the atom is the key to many prob-

By GERALD WENDT

Dean of the School of Chemistry and Physics, Pennsylvania State College



lems of today as well as of the future.

Now why? There are two good reasons.

For one, the atom is the basic unit of matter and what happens to matter must hap-

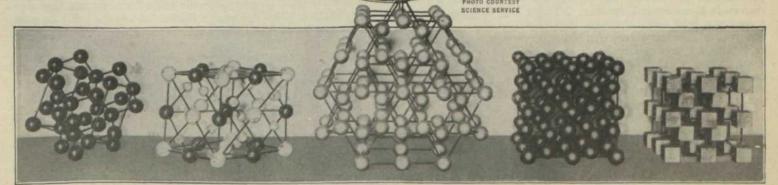
pen primarily to atoms. How an army acts depends on how the individual doughboys act. A European statesman who thinks of America as a tall man with a goatee cannot deal intelligently with us; he doesn't know America until he knows a fair number of individual human Americans. The business man who has relations with labor, the Government, the bankers, or radicalism is bound for failure unless he sees and knows the individuals who make up these aggregates. So the steel man who makes his fortune by changing ore into iron must see the individual atoms of iron in the ore wedded to atoms of oxygen and the carbon atoms in coke pulling away the oxygen, leaving the iron as metal. The more inti-

mately he knows the individual iron atoms the more intelligently he can operate the process.

The second reason is more important. The atom is also the unit of energy. If anything is more important to industry than the materials in which it deals, it is the energy that makes it go. In the atom the two are so closely bound together that it is difficult or impossible to tell which is which.

This tiny thing has insides.
Chemists used to think of it as ultimate, as indivisible, the last word in smallness. Like a billiard ball, its insides were unknown and ignored. That was excusable, since it takes about a billion of them side by side to make an inch. But nowadays we are cautious in calling anything ultimate. Perhaps space has a limit, but so far as we know we can imagine going outwards into space on and on forever. And similarly one can go inwards into smaller and smaller dimensions, infinitely. Whether it looks plausible to human eyes doesn't matter a bit.

In any case the atom doesn't seem as small as it once did because it is now fully



When the secret of energy is wrested from the atom, it will revolutionize industry. At the top a nine-foot spark of billions of electrons, man-made. Industry harnesses energy as

in the factory in the center. The lower picture shows what science believes is the atomic structure of diamond, calcite, magnesium, copper and iron, from left to right.

as complicated as the solar system and has its own microscopic astronomy. The sun is a tiny speck compared to the enormous orbits of the planets that revolve around it. So also what was once thought to be the surface of the atom turns out to be only the orbit of some of the electrons which travel about a very tiny nucleus. Most of it, in fact, is empty just as most of the solar system is empty.

The nucleus contains the "matter," what-

ever that is; no one knows much about it. But the electrons revolving about in the distant outer parts of the atom are well known, and important. The chief difference between iron and nickel, for instance, lies in the number of these electrons. It is these electrons that hold atoms together in various combinations and make them what they are.

Who cares? Well, take the case of gold. It has 79 of these miniature planets. Mercury has 80. It's a bit tempting to pull that extra one out and make gold from quicksilver. No one has succeeded yet, but that is no insurance against the future. Cheerfully I stake my job as a prophet on the prediction that it will be done within a few years, though perhaps never cheaply or in large quantity. But suppose it were! It would be wiser and cheaper to pay no attention to yeggs who each day brought another pound of T.N.T. and placed it under the foundations of the U.S. Treasury than it is for business to ignore what the research laboratories in atomic science are doing. When the atom can threaten to wipe out the gold standard over night several of us who do not attend the Institute of Politics or the Institute of Chemistry have a legitimate interest in it.

Movable Electrons

THAT is only a supposition; let's look at realities. These electrons are essential parts of the atom and some are firmly held, like the one that makes gold different from mercury. But those on the surface are different and come off easily without affecting the rest of the atom. A magnet, properly placed, will pull them out—and

does so in every electric dynamo. Metallic atoms can hold extra electrons just as a pipe will hold gases. Every dynamo is just a suction and force pump that draws electrons from the atoms in the positive pole and pumps them into the negative. The difference in pressure thus produced is called voltage. The effect was known before the discovery of electrons; the dynamo and the motor came before the electron.

But not the radio. It was not until the atom and its electrons were understood that anyone thought of boiling the loose electrons out of a wire. Now that we know what electricity is it's easy. The filament of the familiar three-electrode radio tube

has that purpose. It is kept hot and kept supplied with electrons by the battery. A constant stream of them boils off. The voltage of the grid—i. e., the number of electrons in it—determines how many of these boiled electrons shall get to the plate. Those that get to the plate operate the loud speaker. It's the heart of the radio. Those who developed radio and built a giant business on it had to know the electron and the atom intimately. It was the



@ EWING GALLOWAY, N. Y.

When we approach, through the study of the atom, the perfection of the cold light in the common lightning bug, we will save 96 per cent of the energy that is wasted in present-day illumination.

most important item in their capital.

And the electron tube has entered the field of electric power.

It is being used in the long distance telephone, in the remote control of electric substations and of street lights, in voltage regulation and feeder protection on power lines. Engineers foresee the time when power transmission will be by direct current instead of alternating. The latter is easier to generate and to distribute, but direct current has many advantages in long transmission lines. The electron vacuum tube will be used to transform each into the other. Again a revolution in the electrical industries, where revolutions are commoner than in some of our neighboring republics, and decidedly more profitable.

Within the past year the transmission of

moving pictures by radio, or rather the transmission of events so that they can be seen at long distances by anyone who has a receiving set, has become a reality. Hardly a year ago I made a prediction to this effect in these pages. The word "television" had not been invented; today it is incredible that that prediction seemed visionary a year ago. But a new industry is in its infancy. Taking after its mother, the radio, its heart is an electron tube.

The most important characteristic of the electron is its close relation to those vibrations in the ether that we call light, radio waves or X-rays. They are all produced by electrons and are all alike except in the length of the wave. The radio wave is measured in meters, the visible wave in millionths of a meter, and the X-ray in billionths. The passage of a radio wave draws the electrons into the antennae or sends them down into the condenser and the grid. So also the passage of an X-ray through the human body disarranges the electrons and kills the living cells, whether normal or cancerous. So sunlight causes sunburn. Photography is another case in which the light, the ether wave, displaces the electron and so modifies the parent atom that a chemical effect is produced.

Electrical Eyes in Use

THE excitation of an electric current by means of light is being industrially applied not only in the long distance transmission of pictures by wire or by wireless but in industrial production. Cigars are being automatically graded on the basis of their color. The electrical eye takes one look at each cigar as it passes and sends it to one compartment or another, depending on whether it is light, dark, or medium. One company is studying the use of such an eye to control the toasting of breakfast flakes; when they're done just to the right brown, out they go, automatically.

Then there's the process, invented at the University of Michigan, for the automatic inspection and sorting of roller bearings. The bearings spin by the electrical eye, or photo-electric cell. When perfect they give an even reflected light to the cell. As soon as one with a flaw comes by, the light is stronger or weaker, the eye winks, and a relay throws out the offender. This again is a simple case of the sensitivity of the atoms in the cell to light; in other words, the process depends on the number of electrons given off by the atoms in the cell under the influence of light.

Finally, the same principle is used in one patent for the talking movie. The sound wave is photographed and may be printed directly on the film. As the wave record passes over the transmitter it again operates a photo-electric cell which in turn operates a loud speaker. This involves

electric ears, eyes and vocal chords. Probably the greatest tool that atomic science has devised for prying into the secrets of business is the X-ray. This is dependent on the same process of boiling electrons out of a hot filament. They are then fired with high velocities at the metallic target, and the collision produces the invisible ether vibrations that are X-rays. The wave-length is partly dependent on the metal used in the target; that is, on the kind of atoms that the electrons collide with. The medical uses of these rays are well known, but the industrial uses are rapidly assuming major importance.

I refer not only to their use in detecting blow-holes and interior cracks in castings but more especially to their power to reveal the arrangement of the atoms in almost any material. Questions of hardness, brittleness, malleability, duetility, elasticity, and tensile strength are of paramount importance in metals, fabrics, rubber, cements, welds, and structural materials of all kinds; they are all consequences of the firmness with which atoms grip each other and of the manner in which they are packed together.

X-Ray Helps Study Atoms

THIS is exactly what the X-ray is fitted to show. The study of what happens to the arrangement of the atoms during the heat treatment of steels is changing that art into a science. When impurities are present, such as carbon, sulphur, or nickel, the atoms must rearrange themselves, and the result is a different cohesive power and therefore a change in the hardness or perhaps the ductility. With further X-ray investigation of the arrangement of atoms under such conditions, it will become possible to write accurate prescriptions for alloys of any desired characteristics, including not only the mechanical properties already mentioned but also the electrical conductivity, the heat conductivity, and the magnetic properties.

One of the greatest challenges to research is our present wastefulness in the production of light. In spite of the great advances which have been made

in the past decade we are still as crude as the Chinaman who burned his house to roast a pig. In the best lamp we have a metallic filament which is heated by a current of electrons. When it gets hot enough the collisions of the atoms with each other loosen and shake up the surface electrons sufficiently so that they cause vibrations in the ether, which constitute visible light. Of the energy put in 96 per cent goes to heat the wire and is lost. Only 4 per cent is radiated visibly. The analogy to Charles Lamb's famous story of the discovery of roast pig is obvious. Illumination isn't even in its infancy as a science.

Light is produced by the shifting of the electrons within the orbits in the atom. It should not be necessary to move the entire atom in order

to make the electrons vibrate. Indeed it is not, for we have phosphorescent substances which give cold light, and even the humble firefly proves every summer evening that it can be done. This problem illustrates the close connection between matter and energy. Within the atom they are so closely bound together that they are one. We need first a means of making the electrons vibrate, then an atom so built that the vibrations have the right quality, and cold light will be here. If we can reach 100 per cent efficiency, which we already have with electric heat, we shall have twenty-five times as much light for the same cost. The Dark Ages will be gone

Chemistry Is Primarily Atomic

ND now just one more large field of industry that the atom is entering. That is chemistry. Some substances react under normal conditions. Iron, for instance, combines with water and oxygen and rusts. This can be speeded by heating it; in the oxygen torch iron burns as readily as paper. Other reactions do not take place at all in the cold but do well at high temperatures. Such is the reduction of iron by coke in the blast furnace. But this heating is enormously expensive. The situation is precisely that of the electric light bulb, for again we heat up the entire mass merely in order to loosen the electrons.

Just as the atoms are held together in metallic crystals by the position of their surface electrons so they are held together in chemical compounds by bonds which are nothing but electron orbits. In water, for instance, the oxygen atom provides six surface electrons and the two hydrogen atoms each provide one to form a system of eight revolving in the same or related orbits and holding the three atoms together. That is the entire difference between the two gases, hydrogen and oxygen, and our good friend, liquid water. A mixture of the two gases is stable; no water is formed. But heat them up and the surface electrons become loosened, they rearrange themselves, and water is formed.

But why heat up the entire atom? The right radiation or an electron stream of the right velocity will loosen the electrons without wasting energy in shaking up the mass of the atom. It is being done commercially in the case of the formation of nitric acid from the air, though not yet efficiently. Here, too, nature is perfectly efficient. The green leaves of all plants are marvels of efficiency in using directly the energy of sunlight to combine water and carbon dioxide into cellulose.

The plant needs no high temperature. It would, of course, merely be destroyed if it were heated. But somehow sunlight loosens the electrons, shifts them, ties the atoms in new combinations, and fiber, starch or sugar results. The plant grows. It is the most fundamental reaction in nature and one on which our food and our lives depend. It has not yet been duplicated, but when it is synthetic foods will be on the market, with sugar and starch leading the way.

A Monument to Scientific Progress

HOWEVER attractive these problems and the future which they call forth, it is more convincing to stay with realities and the present day. Returning to existing industries, then, consider Muscle Shoals and the supply of explosives and fertilizers. Ten years ago the electrical process for loosening the electrons in the nitrogen atoms of the air was the cheapest known. It offered promise of cheap nitrates from the air. The pressing military need for nitrates for the explosives industry led to the appropriations for the great power station at Muscle Shoals. Before it was completed the situation was entirely changed because a new process was perfected that does the same thing more cheaply. Certain substances loosen the nitrogen electrons by mere contact. Such a "catalyst" is inexpensive and requires no power to operate it. So today we have enormous catalytic plants for nitrate manufacture, and the great dam at Muscle Shoals stands as a monument to progress, to the speed with which the atom is revealing its secrets to

> chemists and physicists. It is a great power station but its power will have other uses than those for which it was built.

> And so the picture changes day by day. Only the isolated instances have been given, and the future has scarcely been mentioned. tainly the discovery of the interior of the atom is more important today than the discovery of America was in 1500 and will have greater consequences. It has already founded great industries, it has completely revised our philosophy of nature, it offers numberless immediate possibilities to the electrical industries, it has opened an entirely new conception of chemical reactions. In the atom is the focus of light and radiation, electricity and energy, and matter and chemical reactivity. By mastering the atom we master matter, too.

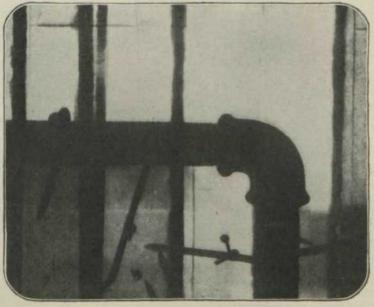


PHOTO COURTESY SCIENCE SERVICE

An X-ray photograph of a pipe elbow in a wall, made without damage to the wall

The Factory Has Left the Home

NE of the most frequent phrases in any discussion of the farm problem runs like this:

"Yes, but the farm is different. It's not like industry. The farm is both a factory and a home."

And another school says that "factoryization" is the solution of the farm problem, that many of its troubles come from the fact that farms are operated in too small units and too much under the influence of the home.

But how long since the home was a factory? We forget that two or three generations ago much, probably most, manufactured articles—articles now turned out on enormous scale—were made where they were consumed. Quoting from the United States Census of 1900 gives the picture: "It seems probable that until about the year

By IRVING S. PAULL

Cartoon by C. R. Macauley

gives the other side of the shield, a round of drudgery in performing tasks that had not changed in methods in centuries. Not only were processes primitive, but the tools had been little changed for ages.

That most important of the domestic arts, bread-making, had not changed materially from the early Egyptian days. Kneading dough required brawn and muscular effort to tax the strength of most women, and it was a task that had to be repeated at weekly or more frequent intervals.

Spinning and weaving, knitting and sewing, baking and brewing, cleaning and scouring, cooking and preserving, and all the other primitive activities of housekeeping in those days were not the limits of home industry. Merchants distributed garments to stitch, and yarn to knit into

stockings, shoe uppers to be sewed, and linen, shirting, sheeting, ticking, jeans and even dimities were commercially produced in homes. These consumed the activities of the children as well as the grownups.

Nail-making was still a fireside industry a hundred years ago, even though nail-making machines had been invented about 1800. Home shoemaking, cabinet-making and a great variety of industries were still associated with the home at the time of the Civil War.

Slaughtering and meat packing was relatively a home industry, with its accompaniment of soap boiling, tanning, etc. Candle dipping was a household occupation as were button making, hat and bonnet making. Dress trimmings and other merchandise were made in the home for delivery on merchants' orders. Occupation was found for each member of the family, and the hours of labor were not restricted to the period of daylight but extended into the night, by candlelight and the glow from the fireplace.

From Home to Factory

MUCH of the industrial and social progress we have made within five or six decades can be ascribed to the fact that we have made important industries of the ordinary activities of housekeeping. Within less than three decades we have revolutionized our whole scheme of domestic economy. We did not suddenly transfer household activities from the kitchen to great manufacturing plants, but moved them first into neighborhood shops where methods were similar to those in the home but on a larger scale. In the effort to increase the volume of production simple machinery was adopted and gradually improved, until a manufacturing technique had developed. Methods that had continued through centuries of homecraft were improved until automatic machines performed intricate operations with a speed and skill that could never be attained by the most capable handworkers.

Neighborhood industries were still of suf-

1850 the bulk of manufacturing done in the United States was carried on in the shop and household by the labor of the fe

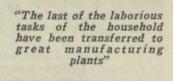
by the labor of the family or individual proprietors, with apprentice assistants, as contrasted with the present system of factory labor, compensated by wages and assisted by power."

Home a Century Ago

WE are apt to think of the home of a century or more ago as a place of comfort and contentment. We picture it in terms of spacious kitchens and big fireplaces,

Dutch ovens and home-made bread and home-cured hams. But we forget the constant and infinite labor for which these things called.

That quotation from the Census Report



ficient importance to be included in the United States Census of Manufactures as recently as the beginning of this century. The products of small shops producing an annual output of less value than \$5,000 were reported as recently as 1919, which in the light of modern industry seems a trifling amount.

The baking of bread is probably the most recent example of this rapid evolution of a domestic process to a technical industry. In 1900 there were few large bread bakeries, and those were in the very large cities. There were about 15,000 bakeries, but they were principally small shops serving customers within walking distance, and their methods of bread-making were like those of the housewife. It was said at that time that a bakery could be established with a dishpan, a sack of flour, a cake of yeast and a kitchen stove. It now costs about a quarter million dollars to equip a modern wholesale bakery, but the equipment is composed of intricate machinery which operates under thermostatic control against variations of temperature, or humidity.

For thousands of years bread was baked in brick or stone ovens which were heated by building a fire within them. After they were sufficiently heated for baking requirements the fire and ashes were withdrawn and the loaves deposited for baking in the stored-up heat. Stoves came into general use less than a century ago with their continuously heated ovens, to replace the brick oven, the Dutch oven of sheet-iron standing before the blaze in the fireplace, or the baking-pot standing in the fireplace surrounded and covered with heaped coals.

Within hardly more than fifteen years every process of bread-making has been made a mechanical process under engineering and laboratory control.

Soap Left Home, Too

WHAT has been said of the perfecting of bread manufacturing methods might be expressed in equal detail with reference to the manufacture of soap during a slightly earlier period. We who associate soap with an attractive wrapper, or carton, can hardly appreciate the fact that until a relatively short time ago the production of soap for ordinary home use was as much a home activity as baking bread. Soft soap was the by-product of the scraps of tallow and other kinds of fat from the kitchen. Soap boiling is not adapted to the modern kitchenette, for it is not one of the dainty domestic arts, and for obvious reasons it was conducted as an out-of-door activity.

Soap and candle-making were a single industry in neighborhood shops in earlier days, and it was not until 1909 that the Government Census dissociated them in reports on manufactures. Benjamin Franklin's father operated a candle- and soapmaking shop, and he had a desire that Benjamin should succeed him in the business. So great was the boy's distaste for the business that at the end of two years he was permitted to become a printer's apprentice.

As long as shop practice and household methods remained alike, industries continued in small shops in the towns and villages, but with the application of machinery and development of more efficient operation they grew rapidly in the large centers where labor was more abundant. Some were influenced by markets and others by sources of material to locate at points of greater convenience.

The soap industry grew in the centers of location of the slaughtering and packing industry because its raw materials came chiefly from that source, and in the great centers of population because its markets were found there. At the beginning of the century, 75 per cent of the soap came from four states, and as recently as 1910 nearly 80 per cent of the mechanically produced bread came from seven of the largest cities.

From the consumer's standpoint it made little difference where soap was manufactured, consequently the industry might have centered in a single city without disadvantage to the users of its products. However, the case is quite different for the baking industry, because its products are consumed within a few hours after they leave the oven.

Manufacture Spreads

FOR somewhat different reasons these two industries are spreading back into the various sections of the United States. This movement is stimulated by the very great per capita increase in consumption during recent years. The annual per capita expenditure for soap at wholesale in 1900 was 90 cents and for bakery products it was \$2.30. It is now \$2.30 for soap and \$10.80 for bakery products. Of the \$10.80 now expended for bakery products \$5.15 is for the purchase of bread and rolls, coffee cake, etc.

As compared with concentration of 75 per cent of the production of soap in four states in 1900, the output of the ten leading states hardly equals 75 per cent of the present total. The spread of the baking industry within about fifteen years has been even greater, especially in bread production. Practically every city of 100,000 population has one or more modern, mechanically equipped wholesale bread-baking plants.

Mechanically equipped wholesale and retail bakeries are found in many important distributing centers of less population than 100,000, and many homes 100 miles from the nearest modern bakery are supplied with fresh bread in sealed wrappers. The speed and certainty of delivery of bread within so little time after it leaves the oven discourages an increasing number of housewives from continuing baking as a household industry.

Baker Improves His Formula

WE undoubtedly have better bread and better soap than were produced for ordinary consumption at the beginning of the century. In those days the baker used a flour-salt-water-yeast formula, while today statistics show us that he is using more sugar, shortening and milk. In 1925 the baking industry expended \$272,227,000 for flour and approximately \$155,707,000 for sugar, shortening, milk and eggs. The per capita consumption of flour has declined since 1900, but that does not signify that, we eat less bread than formerly because there is an increasing consumption of raisins and other ingredients by the baking industry. One formula for raisin-bread is in

proportion of 70 pounds of raisins to 100 pounds of flour. By improving its products and developing new varieties the baking industry has increased the per capita consumption of its products.

consumption of its products.

Through similar methods the soap industry has accomplished the same result. By creating a variety of special purpose soap products, including pastes, powders, flakes, etc., the soap industry has not only lightened the household tasks but has greatly added to consumption of its output.

By taking household tasks out of the home we have created great industries, and by constantly improving methods and products we have increased the per capita consumption of many items. Some of the increase of consumption is undoubtedly due to the fact that these articles may now be secured without effort, while they formerly represented much time-consuming, burdensome effort in the kitchen.

Some of the industries taken from the home have divided into several specialized industries which now compete with one another for patronage. In many instances capacity to produce has outgrown demand, and in practically all industries new centers of production have developed to compete with the older established centers.

We have self-sufficiency by geographic sections instead of big households. This is indicated by the fact that New England with 7 per cent of the population now produces about 9 per cent of the total value of the soap manufactured in the United States and that the Pacific coast with 5.5 per cent of population produces about 5 per cent of the total value. The east and west, north central states possess 32 per cent of the population and produce about 35 per cent of the total value. The Middle Atlantic states have 21 per cent of the population and produce about of the total value.

Hand Bakeries Not All Gone

WHILE the dietary habits of people in every section of the country are growing more uniform as a result of transportation under refrigeration and rapid distribution and the intermingling of people from every section of the country, a geographic comparison of the production and consumption of bread fails to reflect the rapid growth of the mechanically equipped bread-baking industry. There still exists a great number of neighborhood bread bakery shops, which continue the ancient processes, but in competition with modern machinery they occupy the same relative position as the handeraft shoemaker or the roadside wagonmaker. The effect of application of machinery is shown by the fact that 2 per cent of the units in the entire baking industry including crackers, biscuit and other products produces 42 per cent of the total value of output while 52 per cent of the industry produces but 10 per cent of the value and this does not include upward of 3,000 bakeries that produce less than \$5,000 a

Thus it is that these last of the laborious tasks of the household were transferred to neighboring shops and then to great manufacturing plants within a few decades after thousands of years of drudgery in the home.

A New Leadership in Cotton

OTTON has become one of the necessities of modern life.

It is, in fact, used so extensively and in such diversified forms that most people accept it as a commonplace, scarcely realizing anything about the great industry established on this single commodity and its relationship to so many factors in our social and economic life.

There is a widespread inclination to re-

gard the cotton textile industry superficially in terms of only wearing apparel. This simple concept probably states the original object of this longestablished industry, but the scope and importance of cotton textiles have expanded very rapidly within the last twentyfive years.

Because of its many useful products, this industry always has had many ramifications. During recent years these have been multiplied rapidly as cotton manufacture kept in step with the advance of industry generally in this country.

In the past the manufacturer of cotton goods could consider individuals as his typical consumers. With the great business expansion in this country his market now consists not only of individuals but of large industrial consumers which use cotton textiles in the manufacture of other products for extensive markets.

The evolution of these new industrial processes, other important economic and social changes, new methods of merchandising as exemplified in hand-to-mouth buying, rapid

style changes, as well as new conditions in the textile world itself, helped to create the need for an organization within the industry which would coordinate its many elements and represent as a whole the business of cotton manufacturers in making and selling their product. The functions of such an organization, in addition to covering the internal problems of the business, naturally extend to cooperation with the Government and with all related interests -from cotton farming to selling cotton fabrics to the consumer.

Such, in general terms is the rôle of the Cotton Textile Institute, Inc. Its establishment does not mean that there had been a lack of ably managed organizations in the industry. On the contrary, it was recognized that the industry needed a more inclusive organization which would provide a new focal point from which the problems of the entire industry could be examined in a new perspective.

This new organization also was the embodiment of a new spirit of cooperation and was the means of obliterating sectional lines of demarcation for the first time, except for war emergency, in the long history

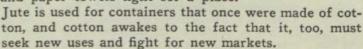
By WALKER D. HINES

President of the Cotton Textile Institute

of the industry. Two important organizations of cotton manufacturers have long existed, rendering and continuing to render services of great value to the industry. These are the National Association of Cot-

THE FAST-MOVING thing in American life is American business. The industry that feels safe and secure and certain today may find itself tomorrow out of a job. New materials, new methods crowd in all the time. King Cotton has been no exception.

Women's fashions have changed. Every woman has turned from cotton stockings to silk. Paper napkins and paper towels fight for a place.



The Cotton Textile Institute was born, and the industry picked out, not a man trained in their own industry, but a man with wide executive experience. Walker Hines, ignorant of cotton but skilled in handling big affairs, became the head of the new institute.

Lawyer, director general of railroads, arbitrator under peace treaties of questions of river shipping, Walker Hines is entering a new field as the head of a vigorous trade association.



Walker D. Hines

ton Manufacturers for the New England Group and the American Cotton Manufacturers' Association for the Southern Group.

It is no part of the Institute's plan to overlap the work of these two substantial and experienced organizations which are concerned largely with manufacturing matters and such regional problems as taxation and other legislation. As representa-tive of the entire industry it is the Institute's hope to initiate constructive measures along other lines for the progress and development of the cotton industry.

Information Needed

EVERY mill in the industry needs more complete information as to the state of supply and demand, and many of them need more information as to their respective costs of producing the manufactured goods. The cotton mills need the benefit of further enlargement of the demand for cotton goods through extending the existing uses and developing new uses. Many questions of specification, standardization and simplification call for solution in the interest of the industry. Beyond all these matters, primarily of internal concern, the

industry has external affairs of the most vital importance. It has common interests with the growers of cotton and those through whom the cotton reaches the mills. It has common interests with practically every phase of distribution of the manufactured product. The Institute is organizing and working toward accomplishment in all these directions.

As to statistics bearing upon supply and

demand, the industry is fortunate in that over two years ago the Association of Cotton Textile Merchants of New York, an organization of the commission houses which act as selling agents for many of the mills, undertook to obtain and distribute to the agents of the interested mills statistics as to production, unfilled orders and stocks on hand. The Association has made admirable prog- . ress in this pioneer work. In many lines of cotton goods it has succeeded in getting almost complete statistics on these

It is the policy of the Insti-tute to avail itself to the fullest extent of the statistics which the Association has been and is compiling along these lines. Therefore the Institute, in undertaking to compile statistics itself, has directed its attention to those classes of goods for which the Association had no figures or the figures were far from complete.

In pursuance of this policy the Institute is developing statistics for the carded varn mills. There are more than 200 of these from which the Associa-

tion had never undertaken to furnish statistics, inasmuch as these yarn mills do not sell through members of the Association.

The Institute has also inaugurated statistics from mills representing more than 95 per cent of the production of wide sheetings for the purpose of supplying information which hitherto has been very incom-

On the other hand, the Association's figures as to narrow sheetings have been much more complete, and the Institute has confined its efforts to gathering supplementary statistics which, through combination with the Association's figures, would make a more complete picture. Likewise the Institute is obtaining statistics from a large number of print-cloth mills and combining them with the Association's statistics. The Institute is also trying to encourage the more careful study of all such information bearing upon supply and demand, because, after all, the statistics have no value unless they are properly studied and understood.

As to cost accounting, the Institute is holding numerous meetings with the accounting representatives of various groups

of mills for the purpose of evolving sound accounting methods which will appeal to the mill executives themselves as perfectly practicable and clearly beneficial.

The Institute will push this work forward and hopes to be of benefit to the industry along these lines. It should be made clear, however, that the Institute itself will not undertake the actual installation or administration of cost accounting systems in the particular mills. Its work will be the development of sound principles which will be susceptible of observance with approximate uniformity, but it will be left to each mill to decide whether it will establish or modify its present cost accounting system as well as to decide upon the agencies that it will employ for installation and supervision of its cost accounting work.

Developing New Uses

THE work of the Institute's New Uses Section is of the most varied character. Almost countless suggestions come forward as to possible new uses or extension of existing uses. These suggestions have to be analyzed, the practicable separated from the impracticable, the more important and more promising having the first attention.

The expansion of existing or development of new uses requires a great deal of time and an infinity of patience and persistence. The work is being zealously carried on and already with gratifying indications of results. In this work the Institute enjoys the closest and most helpful cooperation from the Departments of Agriculture and Commerce, both with respect to domestic and foreign uses for cotton goods made in this country.

There is a wide field for accomplishment in the improvement of specifications for various cotton textiles, particularly those to be bought by the governments, state and federal, and for nearer approaches to standardization and simplification in types and constructions of cotton fabrics. The Institute is stimulating the interest of the mills in these matters, believing that much can be accomplished not only in the economy of manufacture but in the quality of goods placed before the ultimate consumer.

To a large extent all of the foregoing activities will be carried on through group organizations, each dealing with particular types of product. Already the Institute has organized the Wide Sheetings Group, the Narrow Sheetings Group, the Carded Yarn Group, the Print-Cloth Group and the Osnaburg Group.

Each of these groups has its own specific problems which can only be effectively dealt with through group activity. Each group has an advisory committee consisting of active and experienced manufacturers of the goods in question. Problems of statistics, cost accounting, new uses, specifications, standardization, simplification, and so on, are handled with and through these advisory committees by the members of the Institute's central staff.

With respect to the Institute's external affairs, efforts are in progress to promote better bases for mutual understanding and for cooperation. The Institute has created a cotton committee, made up of manufacturers particularly experienced in the problems pertaining primarily to cotton, and this committee will be prepared to establish contacts with all interested in the

production and distribution of raw cotton.

Already plans are made for a conference between this committee and a committee of the American Cotton Growers' Exchange, the national organization representing the cotton farmers' cooperative societies. It is hoped that contacts with those representing the cotton growers will realize one of the purposes which those founding the Institute had always clearly in view, to cooperate with and promote the interest of the cotton growers who in the aggregate constitute one of the most important features in the economic life of the country.

Cooperation Welcomed

IT IS a satisfaction to record that on all sides the Institute has met with the most cordial reception of its suggestions made with a view to promoting better understanding and more effective cooperation. In the case of the American Cotton Growers' Exchange, it was the Exchange that took the initiative in proposing a conference and cooperation. This suggestion found a hearty response from the Institute because it fitted exactly with the program which was already being formulated by the Institute.

On the whole it can fairly be said, even at this early date in the Institute's life, that it is making gratifying progress along the various lines of its work. It is hopeful of promoting much greater mutual knowledge on the part of its members and between its members and their economic neighbors extending all the way from the producer of the cotton to the consumers of the finished goods.

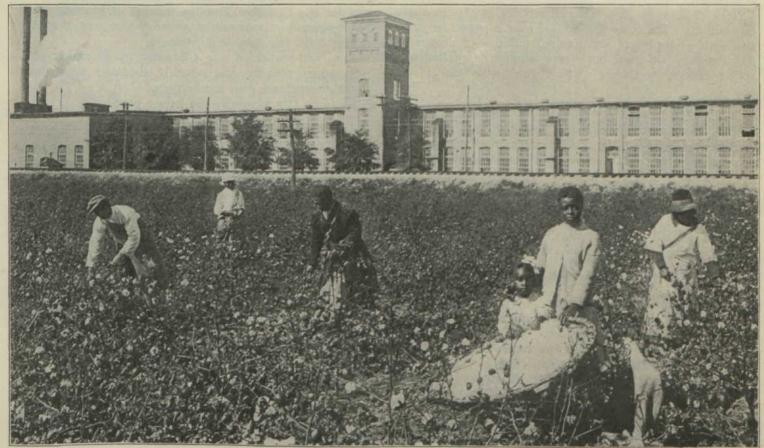


PHOTO BY EWING GALLOWAY

One of the new phases of the cotton industry is a movement of plants to the cotton-growing regions. Here in North Carolina is a mill that has come exceptionally close to its source of supply

NATION'S BUSINESS

Published by the Chamber of Commerce of the United States

MERLE THORPE, Editor

Washington.



November, 1927

If it is not for the public good, it is not for the good of business

Will Rogers, Economist

WILL ROGERS, who syndicates a daily jest to millions, says that the U. S. Chamber is telling Mr. Mellon "how to divide up the Government's four hundred millions surplus," and that "their members should get three hundred and ninety of the four hundred millions."

As a humorist, as a gum chewer, and as a rope thrower, we have nothing but admiration for Mr. Rogers. As an economist and statistician we are less certain of him.

He seems somehow to forget the 6,000,000 stockholders who make up not the financial few but the financial many of this country of ours. He seems to forget the four hundred and odd thousand corporations that are paying taxes as well as the 10,000 corporations which have membership of some sort in the U. S. Chamber. He forgets, too, that all other taxes have been reduced and that the corporation taxes, unnecessarily high as they are, are a clog and a burden on business.

To the more serious argument that we cannot afford to reduce taxes since large appropriations are sure to be asked for the Mississippi River Flood Control, the Boulder Dam, and a dozen more or less meritorious projects, this answer is sufficient.

None of these projects will call for any great immediate expenditure. The costs will be laid over a period of years and with a surplus of six hundred millions of dollars in the Treasury we need not worry about the preliminary appropriations even when we face a necessary tax cut.

The New Competition From Japan

THE fight for the consumer's food dollar never ends. Beef wants more of it, pork wants more of it, bread is prepared to prove that we should eat more bread and less beef. Fruit battles with fruit; oranges, bananas and apples, each calls out its virtues.

And just the other day the editorial eye lit on a new competitor. The Japanese Canned Crab Association of Tokyo is advertising its product!

The Far East is awake to the necessity of cooperation.

The Craft Spirit

THE Graphic Arts Exposition, held recently in Grand Central Palace, New York, was an amazing array of all that is new in printing, engraving annul allied crafts. Yet even a casual observer was aware of more than machinery and materials at the exposition.

There is a spirit about these master printers and their clan that is too rare in America. Few other industries are composed of craftsmen so concerned about the artistic side of their product, as well as the method of its making. This fine pride is a good thing to see, all the better because the exhibitors were unconscious that they showed it.

Held every five years, this was the fifth convention of

the nation's printers. It was decided that it should be thrown open to the public, as the officers felt that since the public bought printing, it might be interested in the way the product was put out. That the public was interested is borne out by the attendance estimates. During the two weeks that the show was open, it drew as many interested spectators as did Dempsey and Tunney in their 1927 edition of the battle of the century. Not a bad comparison, for a subject such as graphic arts.

What Worries the Southwest

VISITS to the cities of the Southwest extending over a period of three years have led one Middle Westerner to conclude that four things are of the greatest interest to the business and professional man living along the main street of the Southwest.

First: The great increase in the volume of mail order purchases.

Second: The impressive growth in the number of chain stores and the volume of business done by them.

Third: The probable influence on the buying habits of the people in any community of the construction of hardsurface roads.

Fourth: The tendency on the part of people who accumulate money in small communities to go elsewhere to invest it or to live.

Getting Out the Tax Vote

IF BUSINESS is to be heard it must speak with no uncertain voice. It must speak in unison. It must speak loudly. There is no way in which the voice of business finds expression so effectively as through the referenda of the U. S. Chamber of Commerce.

Upon every member of the Chamber we urge the necessity of seeing that his organization casts its vote for the pending referendum on taxation. It is important for him and for the Chamber that the opinion of business should be registered. It is important for Congress that they should know the opinion of business.

Any well-wisher of the Chamber would rather see a referendum roundly and soundly defeated than passed thoughtlessly and with indifference.

Paste up this memorandum before you:

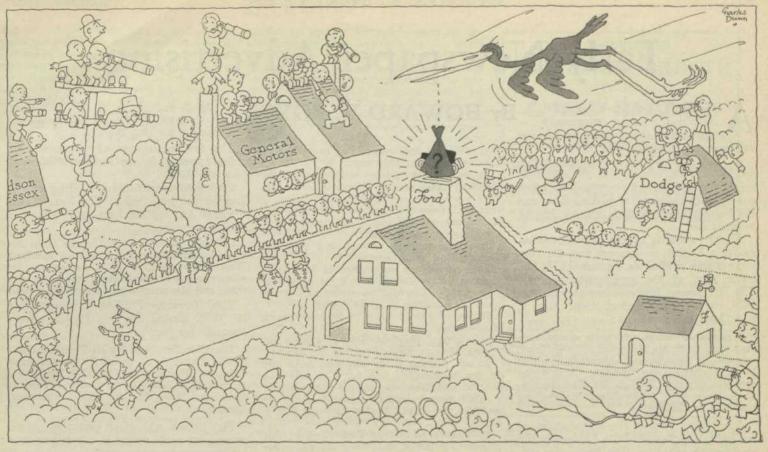
I must find out what my organization is going to do on the taxation referendum of the U. S. Chamber of Commerce.

Resuscitation by Railroad Rates

THE Interstate Commerce Commission seems to be interpreting the Hoch-Smith Resolution as a charter to administer first aid to depressed industries. That at least seems to be the interpretation put upon it by certain members of the Commission in the Lake Cargo Coal and California Fruit cases. It was that interpretation which drew from Commissioner Hall in a dissenting opinion in the former case these words:

Congress has not made of us a special providence.

But rate regulation would be denatured if made into an equalizer of the fortunes and abilities of men whether in the same or different localities. Its function is to keep freight rates within the bounds of reason and fairness in the light of attendant or surrounding transportation conditions, and thereby to afford to all persons and localities the benefit of adequate transportation service. This done, its function is performed, leaving to



The automotive industry halts until the new Ford baby is born

individual initiative to deal with the many and complex industrial problems of our time. These problems we need not even discuss. We have for them as a regulating body no solution, and as for the social problems, the human element, may well say, as we said in Boileau v. P. & L. E. R. R. Co., supra, 132:

"While the fact has been established that the Pittsburgh oper-

"While the fact has been established that the Pittsburgh operators have been enduring more or less hardship, it must not be forgotten that there are operators and miners in the West Virginia fields who have made their investments and who are working for a living and who are generally as human as those who are active in the Pittsburgh district."

To those who cannot believe that the Commission is actuated by such a purpose, we recommend this sentence from the prevailing opinion in the California Fruit case:

Its (that is, the fruit industry's) economic situation is such that it clearly comes within the terms of the Hoch-Smith resolution as entitled to the lowest possible lawful rates compatible with the maintenance of adequate transportation service.

It might be said with equal truth that all industries are entitled to the lowest possible lawful rate, but the fact is that if one gets the "lowest" some other industry must pay. That was pointed out by Commissioner Woodlock in a concurring opinion in the California Fruit case when he said:

"We must shift some of the burden now borne by agricultural products suffering from depression to other classes of traffic, meanwhile maintaining carrier revenues reasonably intact failing evidence that these revenues are excessive."

If the spirit which Commissioner Hall rebuked in the sentences we have quoted continues to animate the Commission's decisions, shall we not find a complete unbalancing of our rate structure and a reduction of railroad revenues since it is always easier to lower rates than to restore or raise them?

It is not hard to see the railroads asking aid from Congress and it is not hard to guess the result.

If the Interstate Commerce Commission can restore a

depressed agricultural industry it can restore any depressed industry. If steel or furniture or shoes halt from lack of orders, should the Interstate Commerce Commission spur them on by lower rates?

If the Saturday Evening Post has more advertisements than NATION'S BUSINESS, why may we not plead depression and ask for a lower postal rate?

If John D. Rockefeller, Jr., can afford to pay a higher fare to Florida than the editor of this magazine, shall he not be charged more?

Ridiculous? Yes, but all of a piece with the theory of rate reductions to restore depressed business.

Said one authority: "If I read the purpose of the Commission right, it is paternalism run mad and it seems to me a step along the road to government ownership."

Mr. Ford's Position

IT PUZZLES the public to realize that the flow of Fords from those giant factories around Detroit is practically at a standstill. If the public would look farther it would see that the whole automobile industry, though not at a standstill, is waiting eagerly, even anxiously, for the new Ford car.

That this should be, is a striking tribute to the unique place which Mr. Ford occupies in his industry. Mr. Ford has been an outstanding figure in automobile production and he has stood curiously aloof from his fellows.

Almost alone he has kept out of that vigorous and ablymanaged organization, the National Automobile Chamber of Commerce.

Now that he finds himself forced into new things and to adopt new ideas one cannot but wonder what effect a closer communion with the others of his industry might have had on Ferd. Would he have gone farther or not so far?

Early Newspaper Advertising

A GERMAN newsbook of 1591 contained what is supposedly the world's first newspaper advertisement. It was a book notice.

A Dutch black-letter newspaper of November 21, 1626, contained an advertisement offering for sale the commodities taken out of ships captured as prizes. This was the earliest advertisement offering general merchandise.

A large majority of the early advertisements in English newspapers were for runaway slaves, which were numerous in the latter part of the seventeenth century. The *Mercurius Politicus* for August 11, 1659, contained the first of these. Here it is, a "lost" advertisement:

A negro-boy about nine years of age, in a gray searge suit, his hair cut close to his head, was lost on Tuesday last, August 9, at night, in St. Nicholas Lane, London. If any one can give notice of him to Mr. Tho. Barker, at the Sugar Loaf, in that Lane, they shall be rewarded for their pains.

Advertising records the introduction of tea, coffee and chocolate into England in the seventeenth century. The first coffee advertisement printed in English appeared in 1652. It was a handbill issued by Pasqua Rosee from his London coffee house in St.

Michael's Alley, Cornhill. The original is in the possession of the British Museum. The advertisement reads:

The Vertue of the Coffee Drink. First Publiquely made and sold in England, by Pasqua Rosee. Grain or Berry called Coffee, groweth upon little Trees, only in the Deserts of Arabia. It is brought from thence, and drunk generally throughout all the Grand Seigniors Dominions. It is a simple, innocent thing, composed into a Drink, by being dryed in an Oven, and ground to Powder, and boiled up with Spring Water, and about half a pint of it to be drunk, fasting an hour before, and not eating an hour after, and to be taken as hot as possibly can be endured; the which will never fetch the skin off the mouth, or raise any blisters, by that reason of that Heat.

The Turks drink at meals and other times, is usually Water, and their Dyet consists of much fruit, the Crudities whereof are very much corrected by this Drink. The quality of this Drink is cold and Dry; and thought to be a Dryer, yet it neither heats, nor inflame more than hot Posset.

It much quickens the spirits, and makes the Heart Lightsome. It is good against sore Eyes, and the

By HOWARD H. BOYCE

better if you hold your head over it, and take in the Steem that way.

It suppresseth Fumes exceedingly, and therefore good against Headach, and will very much stop any Defluxion of Rheums, that distil from the Head upon the Stomach, and so prevent and help Consumptions; and the Cough of the Lungs.

It is excellent to prevent and cure the Dropsy, Gout, and Scurvy.

It is known by experience to be better than any other Drying Drink for people in years, or Children that have running humors upon them, as the Kings Evil, etc.

It is very good to prevent Miscarryings in child-bearing Women.

It is a most excellent Remedy against the Spleen, Hypocondriac Winds, or the like.

It will prevent drowsiness, and make one fit for business, if one have occasion to Watch; and therefore you are not to Drink it after Supper, unless you intend to be watchful, for it will hinder sleep for 3 or 4 hours.

It is observed that in Turkey, where this is generally drunk, that they are not troubled with the Stone, Gout, Dropsie or Scurvey and that their skins are exceedingly clear and white.

It is neither Laxitive nor Restringent.

Made and sold in St. Michaels alley, in Cornhill, by Pasqua Rosee, at the Signe of his own Head.

The first newspaper advertisement for coffee appeared in the *Publick Adviser* of May 26, 1657.

Chocolate was also advertised for sale in London the same year. The issue of the "Publick Adviser" for June, 1657, contained this announcement:

In Bishopgate Street, in Queen's Head Alley, at a Frenchman's House is an excellent West India drink called Chocolate, to be sold, where you may have it ready at any time, and also unmade at reasonable prices.

The Mercurius Politicus for September 30, 1658, carried the first English advertisement for tea:

That Excellent, and by all Physitians, approved China drink, called by the Chineans Tcha, by other nations Tay, alias Tee, is for sale at the Sultaness Head Cophee House, in Sweetings Rents, by the Royal Exchange, London.

Play-houses and other places of public amusement made no use of advertising during the seventeenth century.

The first advertisement for public amusements appeared in the "Flying Post" of July 4, 1700:

At the request and for the Entertainment of several persons of quality at the New Theatre in Lincolns-Inn-Fields, to-morrow, being Friday the 5th of this instant, July, will be acted "The Comical History of Don Quixote," both parts being made into one by the author. With a new entry by the little boy, being his last time of dancing before he goes to France: also Mrs Elfords' new entry, never performed but once, and Miss Evans's jigg and Irish dance; with several new comical dances, composed and performed by Monsier L'Sac and others. Together with a new pastoral Dialogue, by Mr George and Mrs Haynes, and variety of other singing. It being for the benefit of a gentleman in great distress, and for the relief of his wife and 3 children.

The newspapers of 1710 quite frequently carried letters and essays on the theory of advertising.

It is quite fitting that this chapter on early newspaper advertising be summed up with one of the most notable and humorous of these, an article written by Addison, which appeared in the *Tatler* of September 14, 1710:

It is my custom, in a dearth of news, to entertain myself with those collec-



Pawnbroker's advertisement. From "London Tradesmen's Cards of the 18th century" by Ambrose Heal. Courtesy Chas. Scribner's Sons

tions of advertisements that appear at the end of our public prints. These I consider as accounts of news from the little world in the same manner that the foregoing parts of the paper are from the great. If in one we hear that a sovereign prince is fled from his capitol city, in the other we hear of a tradesman that has shut up his shop and run away. If in one we find the victory of a general, in the other we see the desertion of a private soldier. I must confess I have a certain weakness in my temper, that is very often much afflicted by these little domestic occurrences, and have frequently been caught with tears in my eyes over a melancholy advertisement.

But to consider this subject in its most ridiculous lights, advertisements are of great use to the vulgar. First of all, as they are instruments of ambition. A man that is by no means big enough for the Gazette may easily creep into the advertisements; by which means we often see an apothecary in the same paper of news with a plenipotentiary, or a running-footman with an ambassador. An advertisement from Piccadilly goes down to posterity with an article from Madrid, and John Bartlett of Goodman's fields is celebrated in the same paper with the Emperor of Germany. Thus the fable tells us, that the wren mounted as high as the eagle, by getting upon his back.

A second use which this sort of writings hath been turned to of late years, has been the management of controversy; insomuch that above half the advertisements one meets with now-a-days are purely polemical. The inventors of "strops for razors" have written against one another this way for several years, and that with great bitterness; as the whole argument pro and con in the case of "the mourning-gown" is still carried on in the same manner. I need not mention the several proprietors of Dr. Anderson's pills; nor take notice of the many satirical works of this nature so frequently published by Dr. Clark, who has had the confidence to advertise upon that learned knight, my very worthy friend, Sir William Read; but I shall not interpose in their quarrel; Sir William can give him his own in advertisements, that in the judgment of the impartial, are as well penned as the doctor's.

The third and last use of these writings is

to inform the world where they may be furnished with almost everything that is necessary for life. If a man has pains in his head, or spots in his clothes, he may here meet with proper cures and remedies. If a man would recover a wife or a horse that is stolen or strayed; if he wants new sermons, electuaries, asses' milk, or anything else, either for his body or mind, this is the place to look for them in.

The great art in writing advertisements is the finding out a proper method to catch the readers' eye, without which a good thing may pass unobserved, or be lost among commissions of bankrupt. Asterisks and hands were formerly of great use for this purpose. Of late years the N. B. has been much in fashion as also little cuts and figures, the invention of which we must ascribe to the author of spring-trusses. I must not here omit the blind Italian character, which being scarce legible, always fixes and detains the

eye, and gives the curious reader something like the satisfaction of prying into

a secret.

But the great skill in an advertiser is chiefly seen in the style which he makes use of. He is to mention the universal esteem or general repu-tation of things that things were never heard of. If he is a physician or astrologer, he must change his lodgings frequently; and though he never saw anybody in them besides his own family, give notice of it, for the information of the nobility and gentry. Since I am thus usefully employed in writing criticisms on the works of these diminutive authors, I must not pass over in silence an advertisement, which has lately made its appearance and is written altogether in a Ciceronian manner. It was sent to me with five shillings to be inserted among my advertisements; but as it is a pattern of good writing in this way, I shall give it a place in the body of my paper.

"The highest compounded spirit of Lavender, the most glorious, if the expression may be used, enlivening scent and flavour that can possibly be, which so raptures the spirits, delights the gusts and gives such airs to the countenance, as are not to be imagined but by those that have tried it. The A SWEET AND

PERFUMED BREATH

VERSUS

A BAD BREATH.

What lady or gentleman would remain under the curse of a disagreeable breath, when, by using the

BALM OF 1000 FLOWERS,

it would be cured? How many lovers it has separated !!! How many friends forever parted! THE SUBJECT IS SO DELICATE, your nearest friend will not mention it; and you are yourself iguorant of the fact. To effect a radical cure, use the Balm as a tooth-wash night and morning.

The Balm of

THOUSAND FLOWERS

is a sweet and delightful preparation. It is composed of Palm-oil and *Honey*: hence the name. The most

BEAUTIFUL WOMEN

of ancient times used honey to beautify their complexion; but the combination with palm-oil and other valuable ingredients makes it still more valuable. For bathing suffering infants, a few drops poured into a basin of water will dispel all fever, tetter, &c. A few drops poured on your shaving-brush makes a beautiful soft lather, leaving the face pure and white.

When used for washing night and morning, it eradicates all Tan, Pimples, and Freckles, rendering the skin soft and white, and free from blemish.

Price 75 Cents. For sale by all Draggists.

When this advertisement appeared in "Harper's Weekly" in 1864 no one had thought of halitosis. Reproduced, with permission, from "Printer's Ink"

meanest sort of thing is admired by most gentlemen and ladies; but this far more, as by far it exceeds it, to the gaining among all a more than common esteem. It is sold in neat flint bottles, fit for the pocket, only at the Golden Key in Wharton's Court, near Holborn Bars, for three shillings and sixpence, with directions."

At the same time that I recommended the several flowers in which this spirit of lavender is wrapped up, if the expression may be used, I cannot excuse my fellow-labourers for admitting into their papers several uncleanly advertisments, not at all proper to appear in the works of polite writers. Among them I must reckon the "Carminative wind-Expelling Pills." If the doctor had called them "Carminative Pills," he had been as cleanly as any one could have wished; but the second word entirely destroys the decency of the first. There are other absurdities of this nature so very gross, that I dare not mention them; and shall therefore dismiss this subject with an admonition to Michael Parrot. that he do not presume any more to mention a certain worm he knows of, which, by the way, has grown seven feet in my memory; for, if I am not much mistaken, it is the same that was but nine feet long about six months ago.

By the remarks I have here made, it plainly appears that a collection of advertisements is a kind of miscellany; the writers of which contrary to all authors, except men of quality, give money to the booksellers who publish their copies. The genius of the bookseller is chiefly shown in his method of ranging and digesting these little tracks. The last paper I took in my hands places them in the following order:

The true Spanish blacking for shoes, etc. The beautifying cream for the face, etc.

Pease and Plasters, etc. Nector and Ambrosia, etc.

Four freehold tenements of fifteen pounds per annum, etc.

The present state of England, etc. Annotations upon the Tatler, etc.

Walette I

The Universal Instructor in all Arts and Sciences:

Pennsylvania Gazette.

To be comminued Weekly, Dured 24 1728.

left translated tion dayligh North, by

"Pennsylvania Gazette." The first issue of the predecessor of the "Saturday Evening Post," December 24, 1728. From "Selling Forces," published by the Curtis Publishing Company



The Auto Under the Big Tent

By CHRIS BATCHELDER

In THE automobile's early days, racing and organized touring were hunting out its weak spots and developing it mechanically. At the same time the automobile shows were performing their task of selling the idea of the motor car as a means of transportation.

The task of selling in the beginning was not so much a matter of competition between various companies but rather a problem of educating the public to the use of an entirely new product. Basically, that effort involved the changing of national habits of living.

Automobile Shows Became Popular

CAR MANUFACTURERS, realizing that cooperative effort offered the best way to educate the public to the use of motor vehicles, laid plans for big industrial exhibits of an educational nature almost before cars had passed the experimental stages. These "automobile shows," which have been kept up ever since, were finally conducted under the auspices of trade organizations in which the various manufacturers held membership. Through these shows, the industry was able to exhibit all its products under a single roof, a device that aroused great public interest, since it permitted the public to view in a single visit the progress of the entire industry.

Trade and industrial exhibits of earlier dates had usually included the products of various businesses and were marts and fairs conducted for the purpose of stimulating business in general. Automobile

manufacturers were among
the first to organize coopererative exhibits limited to a
single product. The device
has become increasingly popular in the past twenty-five
years and is now a regular practice in many different lines of
business.

This "mass selling," destined later to encompass many other branches of American business, was considered by many a doubtful experiment. And when it was learned that the promoters were planning actually to charge the public an admission fee to inspect merchandise offered them for sale, the amazement of other business men knew no bounds.

In the matter of admissions to exhibits, it must be acknowledged that the automobile enjoys the peculiarly fortunate position of being a class article, yet of universal appeal. Car makers knew that the public was interested in the development of the automobile and saw no reason why they should not make capital out of that public curiosity. So the paid admission became an institution at the shows.

From their very inception, the shows proved themselves business-getters. Even at the early exhibits, sales were always sizable. But even more important than the actual business done at the exhibits was the broad educational effect of these cooperative merchandising efforts, the ultimate, cumulative value of which has been inestimable.

Public curiosity brought the early momentum to automobile show attendance. Probably not 10 per cent of the people attending the first shows were financially able to purchase an automobile, for none of the cars then sold for less than \$2,000. But thousands of people who did not then buy cars began to look forward to a day when they could buy them, and as manufacturing economies reduced the cost of the automobile, and as the wealth of the country grew, motor car companies reaped in sales the benefits of the early public exhibitions.

It is a far cry from those first miscellaneous exhibits to the great merchandising spectacles of today. The early automobile shows were staged largely for the purpose of demonstrating to the public the amazing fact that the vehicles would really run. The cars were grouped by makes in the center of the hall and were encircled by a board track, upon which the demonstrations were given daily.

One trick was to dot the track with bar-

rels through which obstacles the machines safely threaded their way, thus proving that they could be controlled with ease by a driver. The stunt resembled a horseshow feature in which intelligent, high-stepping animals carefully avoid all obstacles set in their path. The drivers were usually in evening clothes and silk hat to lend the "society" atmosphere.

Another trick was to place an inclined track on the roof of the exhibition building. Cars were then run up and down the steep incline, thus proving to a pop-eyed populace that the contraptions would really climb steep grades.

Although the

shows were exhibiting their products side by side, in apparent amiability, rivalries were constantly smoldering. The hall invariably rang with challenges for match contests of all kinds, most of which were never run off. It was fortunate, indeed, that many of these boasts never had to be proved, for a cursory examination under the bonnets of many of the cars would have revealed the startling fact that some of them contained no motors! The rush of preparing models for the shows under early manufacturing methods sometimes left no time for the insertion of such a detail as an engine.

Some Strange Exhibitions

THE FIRST automobile show was conducted by the Automobile Club of America in New York City in 1898. It was held at the old Madison Square Garden, where adequate facilities enabled the promoters to present an orderly exhibit. The first show held at Chicago, however, was a hectic affair. S. A. Miles, who promotes and manages many of these exhibitions, searched the city for a hall big enough to house the exhibit. The best available place was an old ice skating rink, which was unheated.

Nothing daunted, the promoters signed a lease and prepared for the laying of a board floor to cover the ice.

The show opened in a cold snap and the temperature of the building was far below freezing when the exhibit threw wide its doors. But a few days later a thaw set in and melted the ice of the rink, whereupon the improvised floor began to float away. Rubber boots were the order of the day as the exhibitors waded about from booth to booth and salvaged floating equipment.

Mr. Miles, the Barnum of the motor



COUNTEST "AMERICAN MOTORIST"

The latest automobile show at the Grand Central Palace contrasts sharply with the shows of early years. Compare these cars with the buggylike vehicles opposite

business and a graduate of the bicycling days, has been the promoter of the national exhibits at Chicago for twenty-seven years and has managed the New York Show for the past fifteen years. In his work he set a standard of management that has since served as the pattern for many other industrial exhibits. Mr. Miles could never see the necessity for unloosing a flood of complimentary tickets, and his desire for cash attendance only has been a source of more than one joke. At a dinner of car manufacturers some years ago, the late Job E. Hedges, speaker of the evening, insisted that the famous expression, "They shall not pass," accredited to General Petain of France during the World War, really originated with S. A. Miles. But even after such a subtle hint, Mr. Hedges paid cash to see the show the following afternoon.

In the early shows, exhibitors were permitted to decorate their exhibit spaces as they chose. The result was a miscellaneous assortment of furnishing and an eye-destroying collection of bright-colored advertising signs that made the exhibition hall look like a cross between a crazy quilt and an explosion in a paint factory.

Later, the management, fearing a gradual degradation to Coney Island side-show style, substituted uniform furnishings and decorations and limited advertising announcement to the single sign, giving the name of the car. That move greatly enhanced the dignity of the entire exhibit. After much deliberation the management agreed to permit the use of a single, uniform sign stating the price of each model.

Early public interest at the shows centered on the exhibits of French, German and Italian cars rather than on the American products, for at that time foreign cars were far ahead in mechanical efficiency as

well as appearance. From every standpoint their exhibits were the most interesting. The Darracq Company of France displayed at one of the early shows a highly polished chassis which came near to monopolizing attention. Such glittering mechanical displays have since become well-known features of the automobile shows, and one American producer later went so far as to exhibit a gold-plated chassis.

With the popular acceptance of the automobile brought about by the shows, new and strange words began to make their appearance in the everyday American vocabulary and gave philologists interesting new de-

rivations for their studious investigations. Garage, chauffeur, tonneau, chassis, "gas," and many others all fought their way into the dictionaries. And their acceptance by lexicographers was fortunate for the uniformity of the American language, for many words, such as "chauffeur," were handled verbally in half a dozen different ways. Some people thought it was just a new French name for an old-fashioned bedroom bureau.

Automobile Shows Are Successful

THE National Automobile Shows have not only been tremendously successful from the educational and merchandising standpoint but have more than paid for themselves at the same time. Under the system long in use, manufacturers are permitted to draw space in the order of their total business for the preceding year. Thus the largest producer has first choice of space. Each company then pays for the space it has drawn, under a predetermined schedule of rental, depending upon desirability of location and size in square feet, the price per square foot being based on estimated costs of the show.

Following the close of the exhibit, after all expenses have been deducted, the surplus remaining from admission fees is divided pro rata among the exhibiting members. Some years this distribution has exceeded 100 per cent of the original cost of the space to members. In other words, each member's exhibit not only costs no money after the final accounting but actually shows a cash profit.

The immediate success of the National Automobile shows soon led to exhibits of a similar nature by local automobile dealers' associations throughout America, until each year nowadays there are hundreds of local cooperative exhibits, each making its

concentrated merchandising appeal to the nearby market. Some of these local shows, especially in the larger cities, rival the national shows in magnitude of preparation and attendance.

There is no doubt that the early automobile shows popularized the motor vehicle. But popularizing a product is one thing while distributing it successfully is another, and the distribution of automobiles presented difficult problems.

Distribution System Needed

THE VERY earliest sales were handled direct from the factories, but with the greater demand for motor vehicles the need arose for some system of national distribution. It was evident from the start that the automobile could be handled best by exclusive distributors and agents. In the first place, it was a technical article of high value, and secondly, the necessity for service and repair work made a specialized organization necessary.

Some of the companies established factory branches in various parts of the country, but most manufacturers, engaged chiefly in the problems of production solved the problem of sales by appointing exclusive distributors in various districts with franchises giving them sales rights in large territories. Each of these distributors, operating his own company on his own capital, was responsible for sales and service in his territory, and to him fell the work of effecting an organization of dealers to sell the cars throughout his district.

At the time the sales districts were awarded to the early distributors, there was no realization of the growth that awaited the industry, and in many cases the rights to tremendous areas were granted. In later years, with the public assimilating motor cars at an unbelievable rate, distributorships for successful cars in choice territories developed into million-dollar businesses and made great fortunes for their owners.

With the very inception of an automobile distribution system, manufacturing companies established two precedents that have never since been broken and which today are unique among the business practices of the country. The first of these, made possible by the system of exclusive distribution under contract, was the establishment of an

advertised price which protected the public. The second was insistence on the practice of cash payments by distributors and dealers for all carsshipped to them.

Uniform prices are not unknown throughout America today in other lines of business, but the practice of demanding cash for merchandise delivered to sales outlets is rare, especially among organizations selling arti-

cles of high value. Automobiles are shipped to distributors and dealers on a sight-draft bill-of-lading basis and the consignee must pay 100 per cent cash for them before the vehicles can be removed from the freight vards.

That insistence by manufacturers on a cash basis prevented the tying up of capital and eliminated credit losses, which tended to reduce costs and permit factories to sell cars to dealers at lower prices. Dealers in turn extended no credit to retail purchasers but accepted only cash or notes which could immediately be sold to a finance company.

The willingness to cooperate that has always marked the activities of automobile manufacturers has been conspicuous by its absence in the field of actual selling, where the hardest kind of competition has invariably been the rule. This sales competition has been largely responsible for the vast improvement in cars over the past twenty years.

So fickle has the American public been in the matter of motor car styles that the success of companies has often hinged on whether or not they offered bright instead of dark-hued bodies, two instead of four doors, or six instead of four cylinders.

The servicing of cars has always been a sore problem to the industry in connection with sales policies. Automobiles are intricate pieces of mechanism, and, all advertising to the contrary notwithstanding, they sometimes get out of order. The matter of service has always been closely linked with sales because of the fact that the ability to make repeat sales often depended on the type of service given to owners. The complaint of purchasers for many years was that at the ordinary dealer's service station the mechanics greased the steering wheel and upholstery as well as the axle and hub-caps.

In the rush of production and the frenzy of high-pressure selling, service received all too little attention in the earlier days. Later, however, it was recognized as a problem that needed greater attention, and since that time the manufacturing companies have given the matter increasing thought and have done much to aid dealers in the improvement of servicing systems.

One serious service problem has been inability to obtain a sufficient number of trained mechanics. A large distributor of motor cars recently illustrated his point by telling of a conversation he had overheard in his own shop. One of his mechanics, he said, received a visit from a friend who worked in a nearby shop.

"We got the best tools in the world in our shop," remarked the visitor. "Why, we even work down to the hundredth of an

"That's nothing," replied his friend. "In this shop we work down to the thousandth of an inch."

The visitor seemed impressed. "That so?" he asked. "Say, how many thousandths are there in an inch, anyway?"

The other mechanic paused a moment and then replied, "Aw, there must be millions and millions."

Mechanical Appeal in Selling

DEPENDABILITY was the early aim in the manufacture of all the early cars, but, once the fact became established that the average automobile would really get its owner there and back, the sales competition between companies resolved itself into a quest for mechanical perfection. Improvements and innovations in construction and design were flaunted in rapid procession before the credulous public.

Soon mechanical refinements became the rage and served as the basis for sales and advertising campaigns. Gadgets were substituted for doo-hickeys, and the mechanical appeal was under way. Finally the Hudson Company announced a new model and used as a catch-phrase this line: "The Product of 48 Engineers." Since engineers were notorious for their tendency to disagree, many men of the industry were jokingly doubtful of a product comprising 48 ppinions.

But it remained for John C. Wetmore, dean of automobile editors, to originate the story that has made the incident famous. Speaking at Detroit, Mr. Wetmore told of a recent visit to the Hudson plant in that city. While waiting for the arrival of an executive whom he was to interview, Wetmore had engaged in conversation with a pleasant old gentleman who conducted the information desk. Wetmore asked the old

man how long he had been with the company.

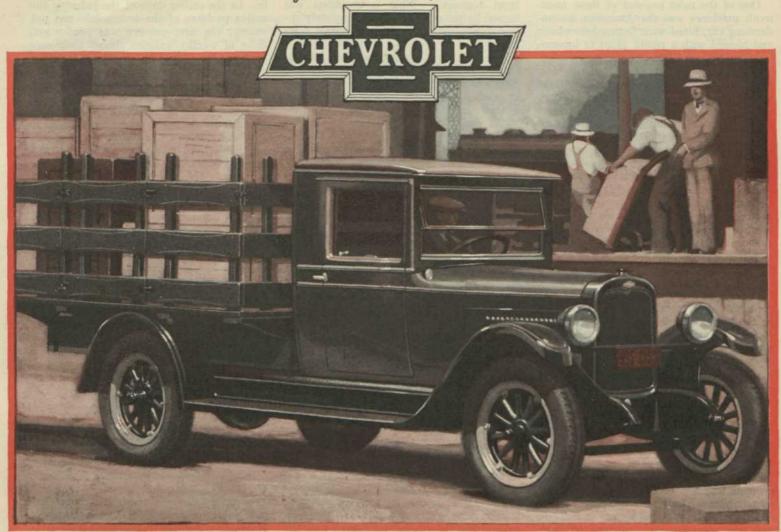
"Two years," answered the man.

"What?" demanded Wetmore, "two years with Hudson and not an engineer yet?"

Later there came a vogue of big cars. Shining leviathans of tremendous speed and power began to make their terrifying runs on the highway. Mechanical efficiency and economy were sacrificed to size, speed and power,



for Economical Transportation



Economical Under Every Haulage Condition

For any business—the merchant, the contractor, the farmer or the coal dealer—

For any ton or half-ton purpose—whether for speedy delivery over city streets or the transportation of heavy loads over rural highways—

—Chevrolet will give you the world's lowest tonmile cost...plus a type of performance that is simply amazing!

This matchless economy has been engineered into Chevrolet trucks as a result of exhaustive testing on the General Motors Proving Ground—and in the General Motors Research Laboratories. Every unit of the

chassis has been developed until it embodies the most efficient design in the commercial car industry.

And it is proved economy—proved thru year after year of use in the hands of thousands of owners!

*395

1-Ton \$495 Chassis with 610

All prices f. o. b. Flint, Michigan

Whether you use one or many trucks, see your Chevrolet dealer. Ask him to show you some of these economy records. He has exactly the body type you need—and will gladly arrange a trial load demonstration to show you how perfectly Chevrolet meets your requirements.

CHEVROLET MOTOR COMPANY, DETROIT, MICHIGAN, Division of General Motors Corporation

World's Largest Builder of Gear-shift Trucks

in accordance with insistent public demand.

One of the most popular of these mammoth machines was the American, an underslung car, fitted with tremendous wheels and blessed with a power plant of locomotive proportions. The car was supposed to "pass anything on the road," but the later comment was that "it would pass anything on the road except a gas station." Then economy of operation began to receive greater emphasis in automobile advertising.

When people first bought motor cars, they were delighted if the vehicles ran. In those early, happy days no one worried about stream lines, the color of the paint, or the hang of the fenders. But, once mechanical efficiency came to be generally expected, competition in the matter of refinements made its appearance as a merchandising factor. And as a result of this emphasis on style, the motor car developed from a kind of noisy, iron skeleton to a sleek, quiet, nicely proportioned vehicle of brilliant hue.

Style, comfort and convenience came to be the keynotes of the sales appeals. What an improvement the windshield was! What a revolution was caused by the addition of doors to the rear tonneau and then to the front tonneau! What a sensation was caused by the offering of the completely enclosed car—the last word in motoring comfort!

After the style feature had been pushed almost to the limit of public credulity and good-looking motor cars were taken for granted, a new sales appeal made its appearance in the factor of safety. Crowded traffic conditions and a mounting total of highway accidents paved the way for emphasis on safety. Four-wheel brakes, low center of gravity, clear-vision bodies, all-steel body construction, windshield wipers and other safety features were among the developments that were vigorously impressed upon the public consciousness of what an automobile should embody.

Of late there has been a trend toward speed, on the ground that speed and acceleration are the answers to the problem of traffic congestion. The progress of this trend, however, seems doubtful. What the future sales appeals will be can only be conjectured; but certain it is that definite characteristics or novelties of one sort or another will be emphasized in turn as long

as there are automobiles to sell to the public. In the earlier days of the industry the major problem of the automobile was not selling; the first concern was production. Sales of worthy vehicles almost took care of themselves. And by constantly lowering costs through the application of mass production methods, the industry has been able to avert for a remarkably long time the major emphasis on selling that is inevitable in any business.

Within the past few years, however, selling, made even more difficult by the used car, has replaced production as the major problem. The combined plants of the country have now attained a possible maximum output that far exceeds what appears to be the annual demand for automobiles. Hence, the business now depends, not on how many cars can be produced, as in former years, but rather on the number that can be sold. Merchandising effort is henceforth bound to play a more important part than ever before.

The motor industry is witnessing a return to the normal situation of the buyers' market and now faces the prospect of a great merchandising period.

Public Utilities Face Attack

By MERRYLE STANLEY RUKEYSER

AT MILFORD, Michigan, 42 miles from Detroit, the General

s proving the standard of living and in diffusing the

Motors Corporation maintains proving grounds where it tests the service value of automobiles. The special pleading of the engineers and production men is ignored, and the performance qualities of new models are objectively determined. On Capitol Hill in Washington, D. C., the people of the United States maintain a spiritual proving ground where whole industries are frequently called upon to demonstrate their honesty and their social utility.

When Congress next convenes in December, the stage will be set for placing the public utility industry—especially the power branch—on trial. Short-sighted men within the industry dismiss the approaching probe as mere political meddling, but the more thoughtful leaders know that in a democracy men and enterprises must be prepared to prove their worth. Industry has a right to ask that such tests be scientific in method, and be conducted in a sincere spirit, without prejudice and without preconception. It has no right to ask more.

If the searchlight of pitiless publicity is turned on the power and light industry, minor scandals and petty skullduggery may be uncovered. Some financial jugglery and the tendency to overdiscount the gains of the future may be disclosed, but apart from these excrescences an impartial investigation is likely to reveal to the American democracy that the economic preeminence of the American nation has been fostered to a tremendous extent by the tendency to place an unprecedented array of power energy at the elbow of the worker. Abuses there have been, but the creative leaders of the power industry, whose praise has been little sung, have done a herculean task toward building up the country-in raising the standard of living and in diffusing the newer luxuries and comforts more widely.

Power has been progressively releasing human beings from drudgery and has been multiplying the productive capacity of the individual. Without the recent marked development of the power industry, the new regimen of high wages, based on mass production and mass consumption, would have been only a fantastic dream of idealists.

If an attempt is made to repair the hair-spring of a delicate watch with a pick and shovel, the results are certain to be unsatisfactory. By the same token, if the search for weak spots in the utility industry is made by politically-minded men who seek only to embarrass the interests and to harass the prosperous, nothing of a constructive nature can be expected. As a matter of fact, when large scale production of anti-corporation oratory flows once more from the congressional halls, some timid holders of utility shares may become frightened and liquidate disadvantageously.

Fact-Finding Has Its Virtues

DURING the process, the cost of new capital to the utilities may temporarily rise, and, if that occurs, the ultimate consumers, whom the politicians profess to love, will pay the freight.

The strong, well-managed, soundly conceived companies will go unharmed through the forthcoming ordeal. If there are fair weather companies, builded of extravagant hopes and motivated by speculative aims, they run the hazard of being stripped of their outer garments, which keep from the investors the true facts. If that occurs, the process of fact finding will not have been in vain. At the proving grounds,

weak motors are rejected or repaired.

I was discussing the coming congressional investigation with one of the older leaders of the public industry. In conversation, he had frequently expressed disapproval at the bidding by more speculative holding companies for operating properties at extravagant prices. "If you were made czar of the industry, I suggested, "what changes would you make?"

"I would make no drastic changes," he replied with genuine sincerity. "On the whole, the development of the industry has been eminently sound. Since the war, however, there has been a great boom in the public utility industry. The Government during the war focussed public attention on the importance of power. That advertised the industry. Accordingly, inexperienced men were attracted to the industry. They sometimes err in paying absurdly high prices for operating properties.

"For five years we have been in a rising market, and fortunately for them and their followers their extravagant appraisals have been in time validated. Some buy properties on a 5 per cent return basis, and at the same time pay more for the capital which they raise. They make up the difference by management fees, engineering and construction fees, and there is a suspicion that their aim has been to milk subsidiaries, if they are able to pull the wool over the eyes of state commissions. Except for water properties, which are on a different basis, I think well-developed utility operating companies are conservatively worth five to six times gross earn-Some, however, are capitalized at seven times gross."

Discriminating and candid observers, who have stood on the side lines and watched

NEWS and comment about The Chicago Tribune, zone marketing and advertising, prepared by Chicago Tribune Business Survey.

World's Greates

LET'S GO!

THE ZERO hour whistle has blown. Labor Day, the turning point for which business expectantly examines its accourrement, found the tempo of commerce already quickened. The main drive of the building industry which has swept general business along with it is still forging along. Now new events have put business in command of the closing quarter of 1927. First and probably foremost is



If every sailor in all the navies of the world were given shore-leave in one port there would be 250,000 less than the multitude that buys The Chicago Tribune every day.



At no time during the Civil War did all the Union Soldiers in the field equal the host that buys The Chicago Sunday Tribune every week.



The greatest army in American history the Meuse-Argonne force, 1,200,000 men, is matched every Sunday by the number of persons who purchase The Tribune.



Hutchinson Photos

JANE EDDINGTON

Jane Eddington, Chicago Tribune cooking
expert, is a charming reason why Chicago
women prefer The Tribune.

the farm situation. The Federal Farm Loan Board reports that farm receipts from all sources will be more than a billion dollars larger than in 1926. This alone is assurance of trade activity.

Reduction of rediscount rates by the Federal Reserve Banks will send interest rates lower and stimulate the use of money for commercial purposes. There is also in prospect a check to the decline of commodity prices—a further encouragement.

Lower Interest

Lower interest rates in the country will also send money to Europe where interest rates are higher. This movement, already noted, will place foreign countries in the market as large buyers of our agricultural products this fall. A considerable number of companies have increased dividend rates and others have declared extra cash and stock dividends. All of this indicates that people will have more to spend than a year ago.

Autos · Steel · Building

Of the three pillars of industry all show actual or prospective strength. The building industry is near its peak, the automobile manufacturers, except Ford, are working at capacity, The Zero Hour of Business She knows her groceries Football Historic Hosts Bread

Newspaper

and his plants will be at full operation shortly. The outlook for steel is excellent, not only for building and automobiles but also for railroad equipment, which is set for a brisk revival.

Zone 7 stands out as a particularly bright spot for sales promotion. The facts are presented in the September issue of The Tribune Survey. Distributed monthly to executives who ask for it.

Home Made Bread

Twenty years ago," said W. E. Long, chairman of the national bread conference, held in Chicago, "eight loaves of bread out of ten caten were baked at home. Today, chiefly because of a sound policy of creating demand through the medium of newspaper space well used, eight out of ten loaves consumed are from bakery ovens."

The Fighting Face of Walter Eckersall

is known to football fans throughout the country. For the past twenty years

merer since he was graduated from the University of Chicago, where for three successive years he was placed on Walter Camp's All-American team and proclaimed the shrewdest quarterback



of all time—Walter Eckersall has been writing football stories for the Chicago Tribune.

His keen analysis of football teams—the uncanny way in which his forecasts hit the truth—his ability as an official—his incisive, forceful stories of major games, make him America's greatest football authority.

this giant industry grow up, have been impressed with the disposition of occasional speculative promoters to step in and buy local properties where the angels feared to tread. Engineers' estimates of property values have sometimes been inflated, sometimes purposely to offset the unduly low appraisals of city engineers who were bent on attaining rate reductions. By the bewitching devices of complicated financial structures, with nonvoting stocks of holding companies, they have controlled, like a margin speculator at the Stock Exchange, far greater arrays of properties than their actual resources legitimately entitled them to. Accordingly, there has been a growing demand for federal regulation of holding companies.

Present Regulation Enough

CONSERVATIVE leaders of the industry, who shy at the idea of more government in industry, assert that abuses can be corrected with the present regulatory machinery. Operating companies are regulated by state commissions, which with their rate-fixing power can dry up at the source any attempts by holding company high financiers to inject water into the system of public utility financing. As for federal regulation of the operating companies, only about 5 per cent of the power is transmitted across the state lines. Federal regulation would impose insuperable administrative obstacles on a commission, and the mere word federal would by no magic assure wiser or fairer legislation than that accorded by the states.

The attack on the utilities centers around the pyramiding of ownership by holding companies and around the question of rates.

Thomas J. Walsh, Democratic senator from Montana, will probably reintroduce his resolution for a thorough congressional inquiry into the public utility industry. If Congress is in search of the basic facts, it might urge a speeding up of the census of the industry which is taken by the Census Bureau every five years; a new regular survev is scheduled to begin at the end of the year. Moreover, the Federal Trade Commission, in response to the Norris resolution, has made an elaborate survey to determine whether there is a power trust. It reported earlier in the year in the negative but suggested that it be authorized to look into the pyramiding process of holding companies. It might be wise for Congress to utilize the data and experience of the Federal Trade Commission as a fact-finding agency. There appears to be no sound reason why the Federal Trade Commission should not be authorized to continue its survey. Congress itself would not have to cover the same ground.

What indictment has Senator Walsh drawn up against the utilities? In a temperate address in the Senate on February 28 last, the senator from Montana charged:

First, "experience has led a long-suffering public to surmise that in such consolidations the stocks of the subsidiaries of the properties merged were, generally speaking, acquired at inflated values, affording an unsafe basis for the securities issued against them, or that the rates exacted of consumers from which interest and dividends must be met are unwarrantedly high."

Secondly, "whether the centralization thus taking place is a natural development redounding to the interest of the public and therefore to be encouraged, or whether it is fraught with perils and likely to be attended with abuses, the consequences of which outweigh any good to be anticipated, is a subject that has evoked much discussion. Instinctively the American people view with alarm any such development. They are prone to believe that the concentration of wealth means the concentration of political power."

Thirdly, there has been since 1920 no substantial reduction in electrical rates, which, compared with the general price

level, are higher than in 1920.

Senator George W. Norris, Republican, of Nebraska, another outstanding critic of the utilities, particularly resents the fact that domestic household consumers pay more for service than the great industrial users, asserting that in Ontario, Canada, where modified government ownership has been in operation, a lower rate for domestic consumers prevails. Senator Norris estimated that, if the people of the United States had paid domestic rates for electric light at the same rate that the people of Ontario paid during the same year, they would have saved \$600,000,000.

The intellectual bases for this new criticism of the utilities are the writings of Prof. William Z. Ripley, Harvard University economic sage, particularly his book, "Main Street and Wall Street."

What, if any, answers can be made to

these points?

As for Senator Walsh's inquiry as to the probable effect of inflated prices for operating companies on rates to consumers and on the investments in securities issued against such purchases, several points deserve consideration.

"Pyramids" Do Not Affect Rates

RATES are generally fixed by state commissions in accordance with the values of operating companies. The capitalization of holding companies, which own securities in operating companies, is no factor in the deliberations of the commissions. Moreover, the capital structure of even the operating companies is not at issue, for the commission has its own standards for determining value. Incidentally, the whole question of valuation is still disputed in the courts, but all parties concede that capitalization has no part in determining value for rate-making purposes. The cure for the impulse to purchase operating companies at inflated prices is at the source-in holding down the earnings of operating companies to a level warranted by actual valuation.

Some companies, like the North American Company, which acquired properties when prices were substantially lower, feel that, if their properties were marked up in accordance with present value, they would support substantially higher rates, but, irrespective of technicalities, Frank L. Dame, the president, who is an advocate of low rates, opposes doing so. Commissions should, under the law, permit the operating companies to earn only a fair return on their true value, irrespective of the fantastic prices which speculative promoters are willing to pay.

As for the investor, there is a more legitimate cause for concern. In so far as the securities of operating companies are involved, new shares and bonds may be issued only in accordance with standards set up by the state commissions. The state laws already go far in setting up safe-guards. Only the holding companies remain unregulated. Since the interests of consumers are not involved, there seems no important reason for federal regulation of public utility holding company financing, unless the central government is also to supervise all industrial and miscellaneous financing. The Federal Government would get into hazardous areas if it sought to put its stamp of approval on specific pieces of financing.

It is scarcely a function of government to give speculative or investment advice. Even a government bureau cannot eliminate normal business risks. The Government steps in only when fraud is committed and some forty states already have blue sky laws to cover fraudulent promotions. Moreover, the Post Office is an instrument for fraud fighting if the use of the mails is involved. Some believe that a federal blue sky law would be desirable, but this controversial problem is not peculiar to the public utility situation, but affects all types of financial operations.

If the Federal Government in an advisory way wishes to undertake to set up a code of sound practices in holding company finances, it might more properly act through the Federal Trade Commission

than through Congress itself.

In 1926 alone, 228 representative companies in the electrical industry raised more than \$236,000,000 of capital for construction needs through the sale of securities directly to consumers. Meter readers, repair men, and installation operators were temporarily turned into stock-salesmen. Since 1914, the power and light companies have acquired more than 1,430,000 shareholders, who have provided more than one billion one hundred million dollars of new capital to the industry.

Well-managed holding companies have a

better access to the reservoir of national capital than most operating companies and can effect a saving in the cost of acquisition of new capital, which can eventually be passed along to consumers in the form of lower rates. Moreover, for the investor, the soundly conceived company gives a better diversification of risk than the indi-

vidual operating company.

Large Companies Have Better Staff

ONLY large operating companies can afford to engage the best technical and executive talent, but it can be made available to small operating units if they are tied together by a holding company. Furthermore, the holding company can be used-as the Electric Bond & Share Company was—to supply venturesome capital for the extension of the industry into rural and other less developed sections. In such instances, holding companies have supplied the initial capital and have held unseasoned securities through the developmental period until they appeared sound enough for distribution to investors.

Incidentally in its report the Commis-



Now Many Executives Are Writing to Commend this Valuable Book!

If letters of appreciation from the major executives of many large corporations are indicative, Oakland has accomplished a truly valuable work in publishing its book, "Experiences of Various Companies in Handling Automobiles with Salesmen".

Here are excerpts from a few of the letters:

A large manufacturer writes: "You certainly deserve a lot of credit for compiling such an attractive booklet and making the contents so interesting."

A paper wholesaler says: "We consider it one of the most unusual presentations of a story that, as far as we know, has never been presented before."

A manufacturer of building material asserts: "We found the book very interesting and instructive. It has helped us to establish a definite policy in handling automobiles with our army of salesmen." The president of a large wholesale grocers' association says: "This association conducted a study about a year ago and we know from experience that the conclusions reached in your book are sound."

Briefly, the book covers three vitally important subjects: "Who Buys the Car—the Company or the Salesman?"; "How are Operating Expenses Handled?"; and "Developing a Plan for Car Operation."

Oakland has interested itself in this subject because of the fast-growing popularity and the remarkable adaptability of Oakland and Pontiac Sixes for business use.

If you want this book which has created such marked interest, fill in and return the coupon below. A copy will be sent to you free by return mail.

OAKLAND MOTOR CAR COMPANY, PONTIAC, MICHIGAN

OAKLAND PONTIAC

PRODUCTS OF SINCES GENERAL MOTORS

99999	Oakland Motor Car Company, Dept. K, Pontiac, Michigan Gentlemen:	30000
30000	Please send me a copy of the book: "Ex- periences of Various Companies in Handling Automobiles with Salesmen". Tell us more about your fleet user's plan.	Sasas
0000	(Name) (Title)	Seese
ड्रा	(City) (State)	

sion in effect found that the General Electric Company did not monopolize or control the production, generation and transmission of electric power. In 1924 the General Electric Company and associates had 12.5 per cent of the installed capacity, 11.8 per cent of the kilowatt-hours generated, and 9.6 per cent of the total number of customers. In 1925 the General Electric Company divested itself of its ownership of the Electric Bond & Share Company, through which it had held its public utility subsidiaries.

As for Senator Walsh's third query concerning rates, spokesmen for the industry point out that, though there has been less deflation in public utility rates since 1920 than in prices generally, there was virtually no previous inflation during the war and early post-armistice years.

In discussing this question, the Rate Research Committee of the National Electric Light Association, in its latest report, says:

The erroneous picture, which took 1920 for the base of purchasing power, takes com-modity prices and the cost of living at their very peaks, and thus shows radical reductions in general prices of as great as 40 per cent in a single year. On such misleading comparison it is asked why domestic electric rates have not also decreased 40 per cent since 1920. The simple and obvious answer, in looking at the entire picture of prices, is that domestic electric rates did not increase during the period that commodity prices were skyrocketing, and therefore the comparison of the reverse swing of decrease of commodity prices could not fairly be applied to electric rates. Further, it is to be noted herein that the average domestic rate did decrease from 8 cents per kw.-hr. in 1920 to 7.4 cents in 1926, or a reduction of 7½ per cent.

Domestic electricity has decreased 15 per cent since 1913 in its almost continuous trend downward since 1882. The average domestic revenue per kilowatt-hour in 1926

was 7.4 cents, which, at the purchasing power of the 1913 cost-of-living dollar, would be equivalent to 4.2 cents. The average revenue per unit of output for the entire industry in 1926 was 2.3 cents per kw.-hr., or exactly the same as it was in 1913. Despite increases in the charges to the power consumers during the war and post-war periods, the average rate for the entire output reached a peak in 1921 of but 6 per cent above the 1913 rate, and recovered to the 1913 base by 1926.

It is true that the electric power industry, like the automotive trade, was one of the exceptional few which was able to avoid the effects of inflation. The industry has been progressive in steadily reducing costs through increasing the quantity of production, through the economies of interconnection which reduce the needs for surplus capacity, and through more efficient use of coal. However, in the last seven years in some sections of the country there has been a lag between the declining cost of power production and the rates to users, and this has been the primary cause of the growing prosperity of the industry. Moreover, there is a widespread difference as to rates in varying localities resulting from different standards of efficiency and of costs.

Gradually Lower Rates

HOWEVER, until the higher cost companies get down nearer the base of the low cost companies, there will be a clamor for rate reductions, and it should be said that the industry is gradually moving to a lower rate basis. The outstanding leaders in the industry are in favor of passing on such savings to customers. The president of one of the large holding companies told me that a proper charge is not what the traffic will bear, but the rate which will stimulate the maximum use of power.

As for Senator Norris's comparison be-

tween rates in the United States and those prevailing in Ontario, it should be recognized that the people of Ontario are favored with exceptionally cheap power, resulting from the availability of water power at Niagara Falls. The inference that the cheapness results from government ownership, however, does not appear to be warranted, as the rate charged by publiclyowned companies in Canada on the average substantially exceeds that levied by private companies.

Harley P. Wilson, formerly president of the Western Power Company and an acknowledged spokesman for the power in-terests, said: "Senator Norris stated that if the people in the homes of the United States had paid the same price in 1926 that was charged by the publicly-owned system in Ontario, 'they would have saved on their electric bills more than \$600,000,-000.' As the total revenues from residence service in 1926 in the United States was but approximately \$500,000,000, it becomes apparent that the senator has again become confused in his calculations.'

Ontario grants lower rates to residential users than to the large industrial consumers, favoring the mass of voters. This method runs counter to the economic facts, for it is more expensive to serve the small users, who necessitate meter readings just as the large customers do.

In commenting on the cheap power in Ontario, Representative Charles A. Eaton, who has been head of the Industrial Relations Department of the National Lamp Works of the General Electric Company, asserted before Congress earlier in the year, that the Ontario "commission pays practically no taxes on its physical property and that its securities are relieved from taxation. Its water power is drawn from Niagara Falls, the cheapest water power on the continent. . . ."

Flood Control, a National Task

ROM the day when Thomas Jefferson consummated, by treaty, the Louisiana Purchase, the flood control of the Mississippi River and its principal tributaries has been a problem of the first magnitude. That treaty transferred the jurisdiction of the entire Mississippi River to the Federal Government, and for that reason, if for no other, the elimination of the menace of such a flood as has this year overwhelmed the lower Valley of the Mississippi is today, as it was in the days of Jefferson, a national and not a state or local problem.

Long-Standing Problem

FOR more than a century—124 years, to be exact—the flood control problem of the greatest of American rivers has vexed and tested the statesmanship of the United States. No one has denied the importance of the proposition, yet flood control has continued year in and year out a moot question. The greatest names in American history, since Jefferson, figure in the controversies which have followed the scores of deluges that have overwhelmed

By L. C. SPEERS Of the New York Times Staff

what is known as the Alluvial Delta of the Mississippi—a vast area approximately 30,000 square miles in extent, about the size of South Carolina, two Marylands, or twenty-three Rhode Islands.

In all the world there are no lands more fertile than these more than 19,000,000 acres, always face to face with the menace of flood. It is a land where everything from cotton and corn to wheat and sugar grows. It begins in the foothills of the Ozarks near Cape Girardeau, Missouri, and extends south to the Gulf of Mexico, a level plain 550 miles long and about 50 miles wide, an alluvial empire not unlike the Egyptian plain of the Nile or the Babylonian plain of the Euphrates. It is the home of more than 2,500,000 people. This being so, the question is, as Secretary Hoover has so well put it, not whether to drive the thousands already behind the levees into the highlands, but whether to guarantee the safety of the Delta, so that

other millions may achieve happiness and prosperity in this wonderland of agriculture and industrial possibilities.

As the day of the convening of a new Congress nears, the problem of the Mississippi is again to the forefront. At last, it would appear, the problem is going to be solved in a big, understandable, sane way by the lawmakers of the nation.

Danger of Politics

THERE is just one danger looming ahead -the possible injection of politics of the partisan, selfish kind, into the situation. Those who know the inside and the outside of this flood problem realize that it must be handled in a broad and statesmanlike way.

The first phase of flood relief is ended. It is one of the brightest pages in American history. It is the story of men and women who forgot selves to battle day and night against a flood terror, the like of which was never before known in the recorded history of the Mississippi. More than 700,000 people were rendered homeless and destitute. Yet the toll of death

Stock Records

Your present system of posting the stores ledger may call for records of quantity only, value only, or both quantity and value, with or without typewritten description of the goods. You may have need for distinctive totals such as "Reserve for Unfilled Orders". Your system may be particular to your business.

Burroughs — in giving you the records you want—not only reduces the time or cost of the work but also furnishes automatic proof

- —that every posting of quantity and value is correct;
- —that no posting has been omitted; none made twice;
- —that the posting medium was priced and extended correctly;
- —that the posting was made to the right account;
- -that new balances are correct.

Investigate! Check and mail the coupon.

Burroughs



BURROUGHS ADDING MACHINE COMPANY, 6271 SECOND BOULEVARD, DETROIT, MICHIGAN

Gentlemen:	Please sena	me more	information	on the	bookkeeping	problems 1	I have checked.	
------------	-------------	---------	-------------	--------	-------------	------------	-----------------	--

Stock Records [

Of quantities—values—or both quantities and values together

Costs

As shown on stores records, payroll and distribution summaries, cost sheets, etc.

Payroll

On cash or check payments

Accounts Receivable

Ledger and statement in combination—ledger and end of month statement—with or without carbon —skeleton or itemized

Accounts Payable

Ledgers with or without remittance advice—Journal-voucher system instead of ledger—including registration of invoices

Sales Audit

By clerks and departments, cash, charge and C. O. D.

Distribution

Labor — materials — purchases — sales—expense—cash

Journalizing and

General Ledger

Complete typewritten description, or date and amount only

Name___

Firm

Address

was only 246 persons in the entire flood-wrecked territory.

It was the greatest task ever undertaken by the American Red Cross, and how that splendid organization rose to the occasion is known to the American people everywhere. The same is true of the herculean task Secretary Herbert Hoover undertook and is still carrying forward to splendid conclusion. It was an example of harmonization of effort and coordination of the service of vast agencies never before approached in this country, a splendid achievement in which the Army and the Navy and other federal agencies, individuals and private organizations without number share the glory.

The second phase, involving the rehabilitation, mainly in agriculture, of thousands of penniless flood victims, is still here and

will be for many months to come. The size of this job would be difficult to exaggerate. There is not a business or a professional man in the lower Valley of the Mississippi who is not awake to the fact that it is one of the most serious economic questions that has developed since the Civil War, for the prosperity of these thousands of farmers and business people is one affecting every part of the nation, every citizen everywhere. Farms must be restored to productivity and farm victims must be given a helping hand. That has to be done.

The Special Flood Control Committee of the Chamber of Commerce of the United States has just completed a tour of the devastations in Arkansas, Louisiana and Mississippi, and President Pierson and his colleagues on the committee saw at first hand the frightful aftermath of the deluge—the pathos of Arkansas City, the Arkansas River port that went under water not once but five times; the brave struggle of Greenville, the long staple cotton city, to come back; the wreckage of Melville, the misery of the Evangeline country.

As a result of this investigation it was brought home to the

committee that the question of rehabilitation is second only to that of permanent flood control. If the flood country is to be restored to normal prosperity, all credit agencies improvised at the request of President Coolidge must be continued for at least another year. This being so, the prolongation of the life of the Flood Credits Corporation, created by the Chamber to aid in the financing of the farmers whose homesteads were in the path of the flood torrents, is assured.

The Flood Is a National Loss

IT IS doubtful whether the country at large appreciates the importance of the rehabilitation feature of the Mississippi Valley disaster.

Take the delta counties of Mississippi, for example. Does one man in a thousand appreciate the fact that the flooding of those counties directly affected every tex-

tile mill in the United States that uses the longer fibers? How many people are aware of the vast loss to the cane sugar industry by the submersion of great areas of Louisiana's famous "Sugar Bowl" parishes? Or of the loss resulting from the drowning of thousands of acres of ricelands? Or from the destruction of countless fields of corn? Totalled, they represent a money loss of probably more than \$200,000,000—some have put it as high as \$500,000,000. Add to this the loss from the destruction of houses and other buildings; the millions that disappeared when railway tracks and bridges disappeared beneath the water; the millions in prospective crops which vanished when the second flood wiped out the last vestige of hope.

Truly, it is a situation which directly or indirectly affects every business, every

THE Flood Control Committee of the National Chamber made a trip through the whole flood section of the lower Mississippi Valley. It has studied the history and economic problems connected with these floods. It has come to the following conclusions which were submitted to the Board of Directors of the National Chamber and by them ordered sent out to all members in the form of a referendum.

1. The Federal Government should hereafter pay the entire cost of constructing and maintaining works necessary to control floods of the lower Mississippi River.

 The Federal Government should assume the sole responsibility for locating, constructing and maintaining such works.

3. There should be an adequate appropriation to insure efficient, continuous and economic work, the funds to be made available as needed.

4. Flood control of the Mississippi River is a work of such magnitude and urgency that it should be dealt with in legislation and administration upon its own merits, separate and distinct from any other undertaking.

breadwinner, every consumer in the nation.

Remember that 174 counties in the flood states were affected by the flood. Take as typical of those in which the damage was greatest and the suffering most acute, Washington County, in Mississippi, the greatest long staple county in the United States, of which Greenville is the county seat

In this county alone the homes completely destroyed numbered 2,150 and were valued at about \$780,000; homes partially destroyed numbered 12,500, and the damage is estimated at \$2,685,000; barns swept away were valued at more than \$100,000; baled cotton, the finest long staple, destroyed or rendered useless for trade purposes, was worth more than \$2,500,000; and the prospective crop loss has been conservatively estimated at not less than \$11,000,000. More than \$350,000 in farm implements was lost; dead chickens repre-

sented a liability in excess of \$75,000; horses, mules, cattle, and hogs drowned were worth, before the flood, somewhere between \$400,000 and \$500,000. The total estimated loss of this one county, when all other items are included, exceeds \$22,000,-000. And Washington was just one county out of 174.

Fortunately the rehabilitation phase is on the way towards solution. Its importance to business is coming home to tradesmen, bankers, toilers, and people generally. To date the work preliminary to rehabilitation—the actual feeding, sheltering and clothing of victims—has been the task of the Red Cross. It has called for an outlay in expenditures and in commitments of about \$16,000,000, leaving on hand about \$1,330,000 to finance the final relief activities in behalf of the destitute over large sections

of the flood country.

The Red Cross, however, cannot take over the financing of the new crops—the remaining and, after all, much greater problem still to be solved if rehabilitation is to be carried through on the scale contemplated by the Flood Credits Corporation and the state agencies with which it is affiliated. Agreement has been reached whereby the state agencies, the Flood Credits Corporation and the Intermediate Credit Banks will extend their activities to the crop year of 1928, thus going far toward solving this second problem.

How Control the Flood?

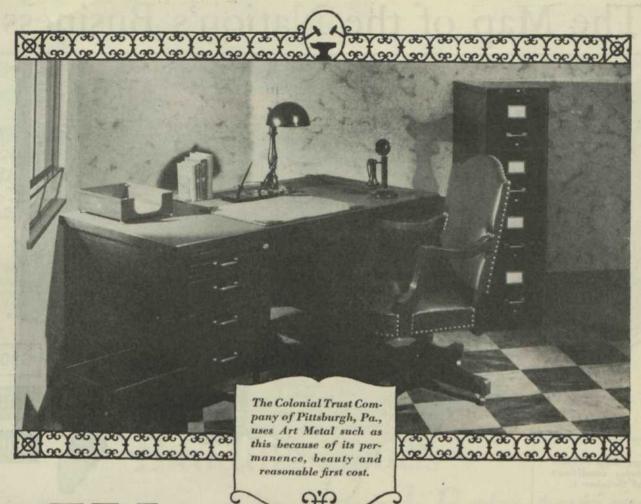
So comes the last phase, namely, flood control. What form will it take, and what will it cost? Those are the questions with which Major General Jadwin, chief of the Army engineers, and more than 150 eminent engineers, from civil life as well as the army, are devoting practically every minute of their time.

The details of the flood control plan are being withheld and will be until it is completed. It can be stated, however, that the plan will call for the construction of a splendid system of standard levees —higher, broader, and stronger

—higher, broader, and stronger than any ever before contemplated—the chain to stretch all the way from the northern limits of the flood zone to the Gulf of Meyico.

What the finished cost of the new system will be cannot be definitely stated, but, according to talk in informed circles, the total will not be less than \$400,000,000.

Summed up, there is every reason for saying it's a half billion dollar proposition. But great as the sum needed for these plans seems, it is obvious that at least ten years will be needed to complete the work. Certainly not more than \$50,000,000 can effectively be used during any one year. The total required is probably not as great as the loss in damage and in crops in the flood of this year. And this year's flood was but one of scores of deluges that have overwhelmed the Valley of the Mississippi since the Louisiana Territory was added to the Union.



Walk in, today...

and cast a critical stranger's eye around your office

WHAT sort of first impression does your office make? Is every file, desk and cabinet not only modern-looking, but ultra modern in a practical way? That's the impression Art Metal Steel Office Equipment makes in thousands of offices. Steel office equipment—recognized best for every practical purpose—is, in Art Metal, made beautiful as well.

It costs no more to own Art Metal

than other fine office equipment. Less, in fact, when you realize that the first cost is the last cost.

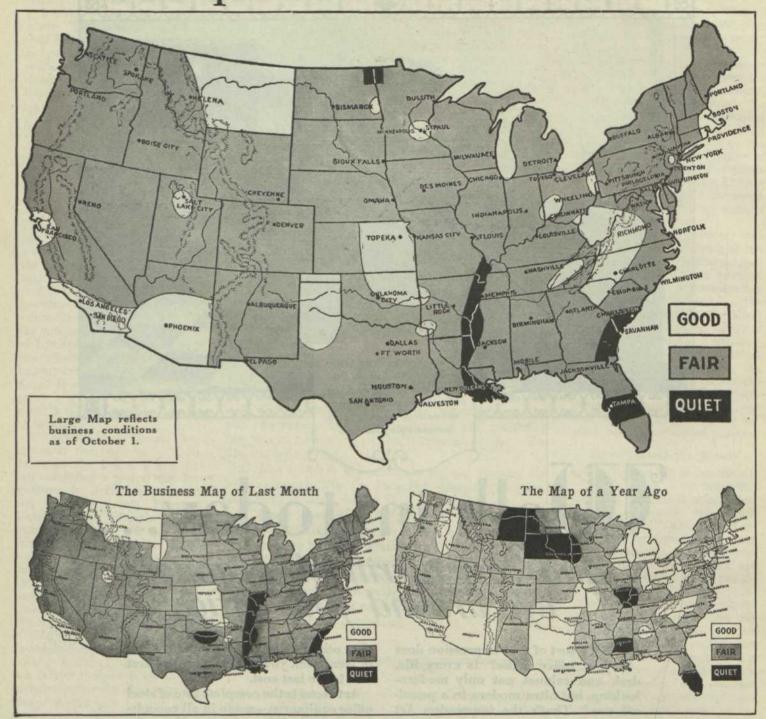
Art Metal is the complete line of steel office equipment—made in all conceivable styles and sizes of desks, files, safes and shelving. It is finished in natural grain or rich Art Metal olive green—any special finish to order. Write us for booklets and prices. Art Metal Construction Co., Jamestown, N. Y.



Steel Office Equipment · Safes and Files



The Map of the Nation's Business



SEPTEMBER saw a gain in wholesale trade over that of August, but retail trade did not measure up to anticipations. It was affected mainly by warm weather and to a lesser degree by the fact that it was a short month in business days. Possibly September gained over the like month of 1926.

Industry in what might be termed the constructive lines, did not expand as much as expected; in fact, some lines actually retrogressed. On the other hand, the crop situation, particularly corn, but cotton also to some extent, favored by warm weather, improved. This improvement, however, tended to reduce somewhat the price advantages over a year ago.

It may be gathered from these statements that a thread of disappointment runs through the comments upon the trade

By FRANK GREENE

Managing Editor, Bradstreet's

outlook as a whole. It must be remembered, however, that there was a great surge forward in the late summer and early fall of 1926, and it is this which makes comparisons for August and September of this year with the corresponding months of 1926 less exhilarating. A year ago the south was well within the shadow of a 50 per cent decline in cotton, and crop outturn in the old spring wheat northwest was disappointing. This year cotton is 50 per cent higher, and the northwest has good yields with fair prices. Today these two areas, therefore, are feeling infinitely better than they did last year.

In the central west and the industrial

areas generally, however, there is not the optimism that distinguished the third quarter of 1926. This is said, of course, with full knowledge that 1927 as a whole has not come up to the 1926 record.

In considering the marked variances shown between the pace set by the two branches of distributive trade proper and the industrial movement, it may be said that wholesale trade, considering the lesser number of business days in September, was fully equal to that of the longer month of August, but was hardly equal to that of September a year ago except in parts of the south and northwest. In primary distribution, as in manufacture of cotton goods, rayon, radio, shoes, other leather goods and jewelry, activity has, however, been notable and widespread.

In retail trade, too, considering draw-



Building Roads and Reputation



The
Herringbone Gears
in the
Double-Reduction
Drive Models

Among the advantages in this modern design is the increased efficiency resulting from the greater tooth surface. Other advantages are reduction of wear—evidenced by a remarkable quietness—and unusual accessibility. The performance of the heavy-duty Internationals is due to such developments in International design, the fruit of 23 years' automotive experience.

THOUSANDS of rugged Internationals are working at the mighty job of road making in every state in the Union—and over the world.

The government of Quebec is using a fleet of Internationals to blaze a highway through the virgin wilds of the Gaspé Peninsula. The Peruvian government has 54 Heavy-Duty Internationals on the great Olmus Project in the mountains of Peru.

Internationals are owned by hundreds of cities for street maintenance and public works. At the head of the list is New York City, using fleets of them in eighteen Departments and Boroughs. Another fleet of 40 is helping to build the city's new subways through solid rock, and working under difficulties that try out and prove every truck quality.

International Harvester builds five sturdy models for heavy hauling—two sizes with double-reduction-gear drive for 2½ and 3½-ton loads, and three with chain drive for 2½, 3½ and 5-ton loads. Whatever your hauling problems or your type of load, ample evidence is at hand to show you how well International Trucks will serve you.

Besides Heavy Duty Trucks the International line includes eight types of Speed Trucks, 4 and 6-cylinder, for 1½, 1½, and 2-ton loads; and the sturdy ½-ton Special Delivery truck. Sold and serviced through 154 Harvester Branches in the United States and Canada, with adequate representation in foreign countries. Folders will be sent on request, and the trucks are on view at the nearest display room.

INTERNATIONAL HARVESTER COMPANY

606 SO. MICHIGAN AVE. (INCORPORATED)

CHICAGO, ILL.

INTERNATIONAL

TRUCKS

When buying an International Truck please mention Nation's Business

backs already mentioned, considerable activity has been manifest, but the influences of changing conditions and channels of trade have rather obscured the showing. Mail-order trade gained 8 per cent over September a year ago; chain stores gained 11.4 per cent. The combined gain was 10.1 per cent over September, 1926. For nine months chain-store sales gained 14 per cent over 1926, mail-order sales increased 2.9 per cent, and the two combined gained 9.4 per cent over a year ago. Departmentstore sales (preliminary report by Federal

Reserve) showed a fraction of one per cent decrease from September, 1926, and ninetenths of one per cent for the eight months. The attached table gives information as to retail and wholesale trade, comparisons being with the same months of 1926:

		M vit	Chains and mail orders	Dept.	Whole-
Jan	I 10.1	p 6.9	1 2.0	p .9	D 3.8
Feb	1 17.1	D 3.0	I 8.1	1 1.7	D 3.9
Mar	I 12.3	z 2.1	I 7.8	D 1.8	D 24
	1 25.1		1 17.6	1 6.9	D 2.7
	1 7.5		I 4.6	D 4.6	D 2.9
June			1 10.6	1 .05	D 3.7
		I 3.0		D 3.7	D 4.9
			z 18.0		
			1 10.1	D 0.1	
			1 9.4	D 1.9	D \$3.5
*Fed	eral Res	erve rep	ort. 181	nos. 16	mos.

So much for trade distribution in the elapsed nine months or fractions thereof. As to industry, it may be noted that pig-iron production for September was the smallest of any month for the past two years and 11.5 per cent below September of last year. Steel ingot output, like pig iron, fell below that of August (daily averages being considered), and was 17 per cent below September, 1926. For nine months pig-iron production fell 4.4 per cent below 1926 and steel output dropped about 6 per cent. House, office and store building permitted for in September lost 12 per cent. For nine months the decrease was 9.9 per cent, the latter following a decrease in 1926 from 1925 of 5.9 per cent.

In automobile manufacture, with the largest individual maker of cars out of produc-

tion in both years, September production was apparently about equal to that of a year ago; but up to September 1 the total output of passenger cars was 17.4 per cent below that of last year and the truck output was 1.6 per cent off.

Soft-coal production for approximately nine months was 2.8 per cent below a year ago and anthracite output fell 1.8 per cent.

Lumber production, despite gains in recent weeks, is below 1926 so far, exact percentages not being available. Car loadings, reflecting quite clearly the reaction in the heavier industries, were 3.4 per cent below September a year ago, and the decrease from 1926 for nine months is six-tenths of one per cent. August railway earnings fell 3.9 per cent behind 1926 in gross and were 11 per cent off in net operating income. For eight months the reduction was 2 per cent in gross receipts and 9.4 per cent in operating income. Cement production and shipments, reflecting road work and large engineering activity, were 4.5 per cent and 6 per cent respectively ahead of eight months of a year ago.

In the lighter industries, mainly textiles, cotton consumption for the cotton season (twelve months ending with July), was 11.4 per cent larger than in the previous season. lative lines is seen in a gain of 14.5 per cent in bank clearings for September over a year ago, with the largest total ever recorded for that month. For nine months clearings showed a gain of 4 per cent over 1926 and also made new high records for the

The importance of New York in the creation of these big totals is found in an increase of 24.5 per cent over September a year ago, while the combined gain of all other cities was only 2.7 per cent. For nine months New York clearings were 7.7

per cent larger than a year ago, while the outside cities showed a loss of seven-tenths of one

per cent. Bank debits make a somewhat similar appearance, the gain of all cities for nine months being 8.8 per cent. New York's gain was 13.2 per cent, and all other cities increased only 3.8 per cent. For the month of September there were naturally fewer fail-

ures than in August. The decrease from August, however, was less than was shown a year ago, and the increase over September last year was 13.4 per cent. For nine months an increase of 2 per cent over 1926 is recorded. With one exception, 1922, this is the largest total in the country's history. Liabilities for nine months showed an increase of 10 per cent over 1926. With two exceptions, 1924 and 1921, they were the largest since this rec-

ord was first made up.

Commodity Prices Up

COMMODITY price move-ments in September were upward. The index numbers rose for the third consecutive month with a gain of 2.8 per cent over August. This represents an increase of 7.1 per cent from the low point of July 1, 1927, and a gain of 3.7 per cent over October 1, 1926. The increase from the post-war low point of June 1, 1921, was 24.9 per cent. while the decrease from the record high of February 1, 1920, was 36.4 per cent. Advances

in provisions, groceries, and dairy products accounted for most of the gain in September. Livestock also advanced, cattle being at the highest point since 1920, and so did leather and textiles. Groups showing decreases for the month were breadstuffs, metals, coal and coke, building materials, chemicals and miscella-

neous products.

Important features of the showing were gains in hog products, beef, and butter. Wheat went off slightly, corn and cotton heavily. A possibly significant feature was a degree of stabilization in mineral oils.

About the most prominent subject of discussion in trade and industry during the period under review has been the talk of the growing intensity of competition.

BUSINESS INDICATORS

Latest month of 1927 and the same month of 1926 and 1925 compared with the same month

-1	A 2 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	Latest Month		nonth 19	
1	Production and Mill Consumption	Available	1927	1926	1925
1	Pig Iron	September	135	153	133
1	Steel Ingots. Copper—Mine (U. S.)	September*	113	138	123
-1	Copper—Mine (U. S.)	August	101	108	102
1	Zine-Primary	August	117	124	115
-	Coal-Bituminous	September*	98	116	110
-1	Petroleum	September*	125	109	108
-	Electrical Energy		140	130	115
1	Cotton Consumption	August			
1	Automobiles	August	177	140	126
-1	Automobiles	August	109	152	90
-1	Rubber Tires	July	150	145	164
1	Cement—Portland	August	121	112	109
	Construction				
	Contracts Awarded (36 States) Dollar Values	September	147	158	159
1	Contracts Awarded (36 States) Square Feet	September	126	139	167
1	Labor	100 Commercial			
1	Factory Employment (U. S.)-F. R. B	August	102	105	105
1	Factory Payroll (U. S.)-F. R. B.	August	109	112	109
1	Wages-Per Capita (N. Y.)	August	107	105	103
1	Transportation		401	100	100
1	Freight Car Loadings.	Santamburt	105	110	104
1	Cross Courting Paramuse			110	104
-1	Gross Operating Revenues	August	110	114	109
-1	Net Operating Income	August	123	139	130
1	Trade-Domestic				
1	Bank Debits-New York City	September*	160	124	118
1	Bank Debits—Outside	September*	126	117	114
ч	Business Failures—Number	September	120	110	112
п	Business Failures—Liabilities	September	96	87	89
4	Department Store Sales-F. R. B	August	122	113	105
1	Five and Ten Cent Store Sales-4 Chains	August	137	118	113
1	Mail Order House Sales—2 Houses	September	130	121	111
н	Wholesale Trade—F. R. B.	August	106	106	105
-	Trade—Foreign	2rugues	100	100	100
а	Exports	Account	110	116	112
1		August	113		115
1	Importa	August	146	132	134
1	Finance	Part North	400	****	***
1	Stock Prices-20 Industrials	September	190	156	140
1	Stock Prices-20 Railroads	September	156	135	114
1	Number of Shares Traded In	September	270	206	206
1	Bond Prices-40 Bonds	September	108	105	102
1	Value of Bonds Sold	September	102	72	100
ı	New Corporate Capital Issues (Domestic)	September	136	99	84
1	Interest Rates-Commercial Paper, 4-6 months	September	125	140	135
1	Wholesale Prices	- Primitive	1 100	-	
1	U. S. Bureau of Labor Statistics	August	98	100	107
1		September	102	98	109
1	Bradstreet's				102
1	Dun's	September 1			
1				, 1914 =	
1	THE REPORT OF THE PARTY OF THE			August	August
ı	Retail Purchasing Power, July, 1914 = 100		1927	1926	1925
ı	Purchasing Power of the Retail Dollar			61	59
1	Purchasing Power of the Clothing Dollar		59	58	57
1	Purchasing Power of the Food Dollar		66	64	63
1	Purchasing Power of the Rent Dollar		59	57	56
1	*Preliminary.		-	1000	The same
1	The state of the s	at a Thomas	4 337	771	2. 19
1	Prepared for Nation's Business by General Statis	tical Departmen	it, Weste	an Elect	ne Com-
1	pany, Inc.				

Raw silk takings by mills made a new record, being 13 per cent ahead of 1926 for nine months. Shoe manufacturing, leather output, and rayon and radio production are all ahead of 1926.

Stock and Bond Sales Increase

AS TO the usual financial measures of movement, it may be said that stock sales on the New York Exchange in September were 40 per cent ahead of last year, while bond sales were I per cent off. For the nine-month period stock sales set a record, being 23 per cent ahead of 1926. Bond sales were 14 per cent larger.

Reflection of this activity and of big dealings in cotton, grain, and other specu-



Stehli Silks Corporation, Lancaster, Pa. Cooper Hewitt illumination.

143 C C. H. E. CO. 1927

ROPING into the harness of a silk loom to knot a broken thread is not an easy operation. Fingers must be nimble. Eyes must be quick. Above all, the light must be able to reach down inside and transform confusion into clearness.

When sixteen hundred looms operating on a 24-hour day schedule need light of this quality, the problem becomes intensified. To this problem the Stehli Silks Corporation have found a satisfactory solution — they found it as long ago as 1906, in fact — by adopting Cooper Hewitt illumination for all five of their manufacturing plants. In their Lancaster mill, one of the "show mills" of the industry, a 100 per cent Cooper Hewitt Work-Light installation is used.

Results? For one thing, night shift on a par with day shift for quality of production as well as for speed. For another, unqualified success in lighting the highly perfected examining operation, where the fabric is inspected inch by inch. In the words of an officer of the company:

"Employees working under Cooper Hewitt light are practically free from eyestrain or fatigue. In fact, we have had some instances in which individuals claim that it is less fatiguing to their eyes than daylight itself." Write for Bulletin 500. Cooper Hewitt Electric Co., Hoboken, N. J.

OPER HEWITT



Cooper Hewitt Work-Light is overhead illumination that gets down into every machine and kills shadows



The spinning room of the Cross Cotton Mills, Marion, N. C., always looks like this. The Cooper Hewitt installation means that no caprice of daylight ever interferes with uniform output and quality

The advantages of mercuryvapor lighting are the sort that you can measure

It would be hard to find a greater contrast in industrial operations than the thumping punch presses of a plant like Ford's and the delicate jacquard looms of a mill like Lund Textile, at Farnumsville, Mass. Yet Cooper Hewitt Work-Light satisfies the specific requirements of both.

In the Ternstedt plant at Detroit, powerful hydraulic presses stamp out fenders and other automobile parts. In the Leeds & Northrup plant at Philadelphia, sensitive fingers assemble and adjust the fine mechanisms of pyrometers, etc. And in both places, again, you find Work-Light.

The AC Spark Plug Company says that it gives better satisfaction than daylight on the assembly and inspection of jewels and speed cups for its speedometers. The Eastman Kodak Company employs it for the inspection of its lenses. C. H. Masland & Sons credit it with increasing the output of their carpet looms 3.8 per cent. The Holeproof Hosiery Company obtained a similar result on both knitting and looping

You cannot look at a picture of a Cooper Hewitt lighted workroom without realizing that there is "something different" about it. The air seems clear, because there are no "high spots" or "low spots" to fog the impression. Everything seems literally to be in a light bath, which means ideal general illumination. And the fine detail of machines, right down to the very working point, stands out so sharply that you know Cooper Hewitt to be ideal job lighting as well.

These pictures are working demonstrations, in miniature. There is no better evidence of what any light can do, except experience with it. If pictures from your own plant could not match them, for both general effect and sharpness of detail, you have a great deal to gain by seeing Cooper Hewitt for yourself.

If you have ever tried to handle the myriad needles, concentrated in the small diameter of a machine like this, you know it as an "acid test" of lighting. Photo shows how Cooper Hewitt does it—without glare and without shadow—for every machine in the plant



Deep in the works of any machine — loom, lathe or punch press — there are fields of reduced intensity which light doesn't reach directly. Cooper Hewitt provides more seeing power at these points than any other light. This picture gives an idea of what this means to eyes working deep down in a loom harness

But you can see, for yourself in your own plant. You obligate yourself in no way by requesting and using a trial installation. Address Cooper Hewitt Electric Company, 123 River Street, Hoboken, N. J.

COOPER HEWITT



Membership Vote On Tax Plan

FIFTEEN hundred organization members of the United States Chamber of Commerce now have before them Referendum 50 which embodies the recommendations of the Chamber's Committee on Federal Taxation. These organization members in turn have a membership of eight hundred thousand, so that the results of the voting will represent business opinion

in all parts of the country

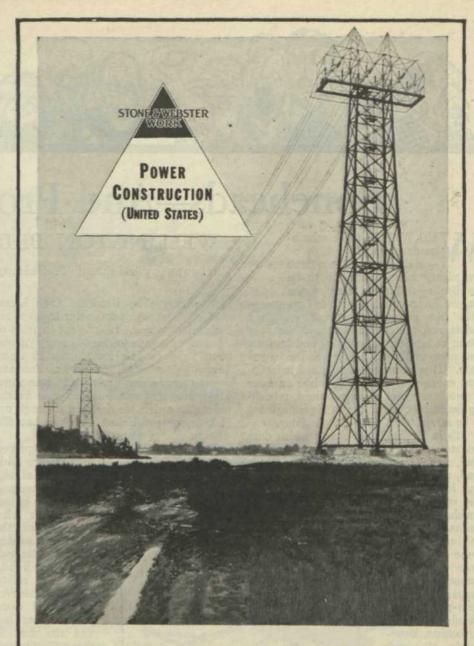
This referendum places before the Chamber's membership the proposals of the Committee with respect to the action Congress should take upon federal taxes in the session beginning in December. The proposals are that Congress should enact reductions which will mount to at least \$400,-000,000 in the first full year in which they are in effect, that these reductions should include a decrease in the rate of the corporate income tax to not more than 10 per cent for income earned in 1927, and lastly that Congress should extend the life of the Joint Congressional Tax Committee which is now studying the problems arising under the present system of federal taxation.

On the first proposal to reduce and repeal federal taxes to the amount of \$400,-000,000 the Committee points out: "It is an axiom of taxation that taxes be so devised that while producing sufficient but not unnecessarily large amounts of revenues they should at the same time offer the minimum interference with the economic well being and development of the country. The Committee states further: "Any large unappropriated sums in the Treasury over and above the amounts required to meet necessary expenditures are a constant temptation for extravagant appropriations."

Thirty-two per cent of the total federal taxes were paid by the corporation income tax for the fiscal year ending June 30, 1927. In pointing out the importance of reducing this tax to not more than 10 per cent the Committee reports: "Quite apart from the onerous burden placed on corporations, reliance to such an extent on one source of income is a doubtful fiscal policy, since any vicissitudes, such as a business depression, which would materially affect this one source of revenue might seriously embarrass the financial operations of the Government."

State and local jurisdictions are also laying a heavy hand on corporations. "Recent statistics regarding the taxes paid by the corporations to state and local governments are not available, but in 1924 these governments collected over \$1,550,-000,000 from the corporations, making the total taxes, including federal levies, about \$2,500,000,000. In that year taxes paid by corporations were equal to two-thirds of the amount paid out in cash dividends."

The referendum was mailed to organization members on October 7 and their vote must be returned to the National Chamber by November 21. Each organization is entitled to one vote for the first twenty-five members and one for each two hundred thereafter, up to a total of ten votes.



The power construction work of Stone & Webster is 3,120,000 horse power-10% of the installed capacity of the industry. Steam power work, 2,060,000 h.p. Water power work, 1,060,000 h.p.

The illustration shows the Fore River crossing of main 110,000 volt transmission lines designed and built by Stone & Webster, Inc., under supervision of I. E. Moultrop, Chief Engineer, The Edison Electric Illuminating Company of Boston.

STONE & WEBSTER

INCORPORATED

BOSTON, 49 Federal Stree NEW YORK, 120 Broadway CHICAGO, First National Bank Bldg



SAN FRANCISCO, Holbrook Bldg. PITTSBURGH, Union Trust Bldg. PHILADELPHIA, Real Estate Trust Bldg.



Boneheads-And Proud of It!

WHO WANTS to be a bonehead, anyway?

Well, down in Texas there are plenty who would like to be boneheads—and are. They're the biggest dummies in the world, I suppose—folks like editors and preachers, great jurists and plutocratic dentists; the very cream of intellectual, political and business leadership in the largest city of the largest state. They're brave enough, and independent enough, to grant themselves an hour or two every week of unrestrained, refreshing foolishness. And they're big enough not to be afraid to be quoted at laughing.

to be afraid to be quoted at laughing.

"It's in Dallas!" is a slogan which does not stop at ivory. There's many a long head, many a broad head, many a thick head, many a knowing head, packed away here in the most unique luncheon club in

the world—the Bonehead Club of Dallas. This organization for some years has been a joy to phrenologists, an inspiration to map-makers, a stimulus to local cartoonists. Boneheads all—and proud of it!

The Bonehead Club is different. There's no basis by which to compare it with such other worthies as Rotary or Ki-wanis, Lion or Lamb. Every city needs one. But not every city could have one and maintain the Bonehead virility. Boneheadism simply does not lend itself to syndication. Its individuality - its utter self-sufficiency—is the very heart of Bonehead success. Its name and its functions are protected to some extent by charter from the Texas secretary of state, but its influence

By WELLINGTON BRINK

Cartoons by Richard T. Salmon

is sweeping. The Bonehead Club boasts that it has no object and never hopes to accomplish anything. It's not out to uplift or reform. It is alert to sidestep every "movement" and twiddle its thumbs at every "cause." Best of all, there are no dues and no circumscribing rules of procedure. When the treasurer finds no coin in the coffers, he orders his brethren to cough up, kick in, or get kicked out; the hat fills quickly.

Every Friday noon this group of professional and business men throws care aside and gives worry the horselaugh. Incidentally, it gives Dallas a hundred thousand

chuckles or so. Whenever the emotions of the local citizenship become strained. the Boneheads serve as a safety valve. Whenever a political campaign grows hot and the mud is flying fast, sure as shootin' the Boneheads stage a burlesque that sets the town laughing and relieves the tension. There is no field wherein the Boneheads fear to tread, no dignities nor dignitaries toward which they stand in awe. Education, politics, economics, diplomacy, religion, drama, music -it's all in the realm of these modern iconoclasts.

On those alltoo-infrequent occasions when the Boneheads consent to take the air, every radio receiving set within a radius of many miles is tuned in on these masters of jocosity. The baby gurgles at the nonsense, and grandma allows herself more than one quiet smile, while father frankly hoots his hootiest.

Presiding over Bonehead activities is President George B. Angell, known officially as the "Big Chief." It is a matter of club etiquette for each member to vote for himself for this exalted position. The result, therefore, is repeatedly a deadlock. An unwritten law requires the president to hold over, as a consequence, and automatically continues the 56 other members as vice-presidents. Here, it would seem, is machine politics in its most deprayed form. Chronic officeholders, egad!

Waiting List Is Half-Baked

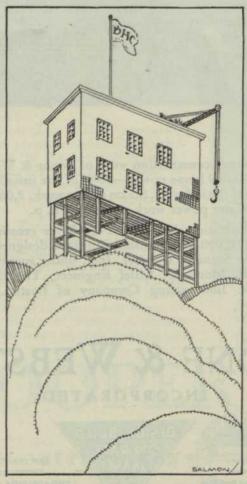
THERE are but 57 Boneheads. Naturally, they are known as the 57 varieties. Bona fide members are classified as hardboiled. The waiting list—and it is long—is catalogued as half-baked. He who gains the inner circle well may congratulate himself, for he has passed and repassed many times before the raking eyes of a secret membership committee, whose chief concerns are the items of temperament and general fitness.

There was more unanimity with respect to Sam Breadon, president of the St. Louis Cardinals, baseball champions of 1926. Following the trade of Rogers Hornsby for Giant players, this telegram was sent to the Cardinal mogul:

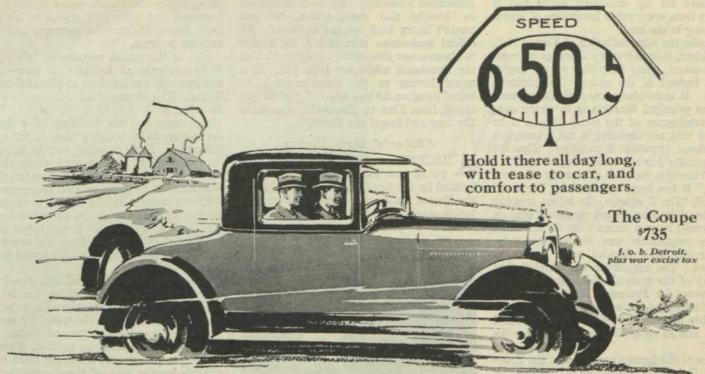
It has come to the attention of this club that you recently traded Hornsby, winner of last year's pennant and world series, for two New York Giants and a chew of tobacco. It therefore becomes our solemn duty to advise you that as a result of said trade you automatically are admitted to membership in this organization, and the Bonehead Club extends to you its greetings and wishes you a most unhappy Christmas. It is our suggestion, in view of your fitness to become a member of our organization, that you trade O'Farrell for a box of good cigars and come to Dallas to dwell in the Bonehead House of Fame forever.

Deploring the publicity which this action and various others have brought in newspapers of the nation, the Boneheads have gone on record as being of the opinion that the less that is known about the club the more it will be admired.

The Bonehead House of Fame referred to in the telegram is but one institution of several established by this unusual organization. By all odds the most pretentious undertaking of the Boneheads is the Bonehead University, now old enough to have



"The Boneheads had no money for a building site, so they decided to build from the top down, and settle on a location later"



6-Cylinder Efficiency in Business Transportation

In outselling, almost two to one, any other "Six" at or near the price, for the first nine months this year, the Essex Super-Six has made equally great advances in fleet and individual sales for business transportation.

The same advantages give it preference with expert buyers for business use that account for its popularity with motorists everywhere.

6-Cylinder Smoothness and Dash—Highcompression Power and Performance— Size and Roominess without Unwieldiness—Steady Riding without Useless Weight—50 Miles an hour all day long and far greater speed when wanted— Riding Ease Like Gliding—Economy of Price, with Operation and Maintenance Engineered to Lowest Costs.

Without obligation our representatives will discuss with your experts any problem of costs, maintenance, management and methods of purchase, and bring to that discussion an equipment and knowledge of fleet and business car operation that would make the exchange of ideas profitable.

One of our sales engineers is near you. Write or wire.



The starter on the instrument board gives quick, sure starting in all weather.



The roomy rear deck of the Essex Coupe gives ample carrying space.

HUDSON MOTOR CAR COMPANY, Detroit, Michigan

ESSEX Super-Six

established some traditions of its own and to have set up standards which put it apart from every other institution of higher

learning in the land.

Under the administration of Vernor Hall, president, this university observes its commencement, quite properly, at the beginning instead of the end of the scholastic year. It maintains a research department whose principal function is to watch over the intelligence of the club. Should it be found that any member is not a complete Bonehead, expulsion is to follow. the penalty has not been invoked.

"When the chair of astronomy was created," it has been explained by Big Chief Angell, "Dr. J. Martin, the tallest member of the club, was elected professor because he would have a closer view of the stars. When requisition was made for a telescope the club decided none would be needed. The suggestion was adopted that if any of the stars should prove to be too far away for Professor Martin to see he should look as far as he can, then call on another member to begin at that point and look, and so on until someone shall see the star."

One of the famous graduates of the Bonehead University is Col. E. M. House. "If you don't believe it, read his articles," adjured President Hall, at the time the House papers were being published over the country.

Not long ago a School of Crime was set up as a part of the larger institution, and endowed to the extent of \$14,936,418.05of which five cents has been advanced as

Baccalaureate Par Excellence

I N announcing a recent Commencement Program, at which goatskin diplomas were to be presented to the degradation class, President Hall outlined his baccalaureate address. He declared that it would have "neither text, start or finish-being merely a compendium of all the Commencement addresses ever made in Dallas." He contended that there are too many ideas in the world-that if there were no ideas, there would be no murders or other crimes.

The local press reported of this Commencement that the students who received degrees from the Department of Bootlegging were all in good spirits. The valedictorian, chosen because of having received the largest number of discredits, spoke earnestly on "How I Got My Zero Degree."

Sometime ago a determined effort was made to oust the scholarly incumbent of the presidential chair. Bert Chaney, one of the aspirants for the job, saw his ambitions flouted by a rival who presented evidence to indicate that Mr. Chaney was descended from a bullfrog. Producing a large picture of one of these well-known amphibians, outfitted with plug hat and umbrella, this rival seated Mr. Chaney in a chair, pressed upon him similar accouterment, forced the candidate to hold his mouth open, and left the club to draw its own conclusions. By unanimous vote of the university regents, who were 100 per cent Fundamentalist, Mr. Chaney's bid was squelched.

The pastor of the First Presbyterian Church, leaving on a trip to the Holy Land, was given a shower of lead life-

savers and other appropriate gifts. The Boneheads touchingly expressed themselves as "hopeful that you'll return, but you needn't hurry back on our account." official spokesman admonished the doctor to observe new sins, return and report, that the Boneheads might try them out. In a moral lecture to the department hardboiled member, he was adjured, "When you travel from Dan to Beersheba, remember the beer and forget the Sheba.'

NATION'S BUSINESS

"Robert's" Made Useless

A RECENT meeting furnished an example of how business is sometimes expedited by the Boneheads-an example that the United States Senate would do well to weigh carefully with a view to following.



"The chair of astronomy was given to the tallest member"

Someone made a motion that the club declare war on Nicaragua; someone else made a motion that war not be declared; a third moved that Mayor Blaylock, a member, be sent to lead the expeditionary force; and a fourth proposed that a president pro tem be appointed who knew something of the rudiments of parliamentary law. The Big Chief put all motions simultaneously and announced that the affirmative carried.

Shade for a Star

MOTION picture star for several days lived in a show-window bungalow arranged by a leading Dallas department store. The Boneheads presented her with a window shade.

Trudy Ederle came to town. The Boneheads engaged her to judge one of their

periodic bathing revues. Col. S. E. Moss. 300-pound water commissioner of the city, captured first honors by reason of his superb figure, his graceful carriage, and his striking costume.

One of the quaint customs of this body is to celebrate all holidays at once-and nowhere else are holidays so plentiful as in Texas. The economy of this practice is amazing.

Sometime ago the building of a fiftyseven-story office building came in for consideration. Each member was to have a floor to himself. For several weeks there was a hot argument over the matter of a location. At last, finding that there wasn't sufficient money in the treasury to purchase a site, anyway, it was agreed to begin construction at the top. It was hoped that by the time the ground floor was reached. the greater problem of location would have been settled.

When the Oriental Hotel was razed to make way for a new building, the Boneheads were very much perplexed as to what ought to be done with the wells, for many years the hostelry's source of water. A happy solution finally was reached, it being decided to pull up the wells, cut them into suitable lengths, and sell them as postholes. Texas agriculture is developing rapidly, and lots of postholes are needed.

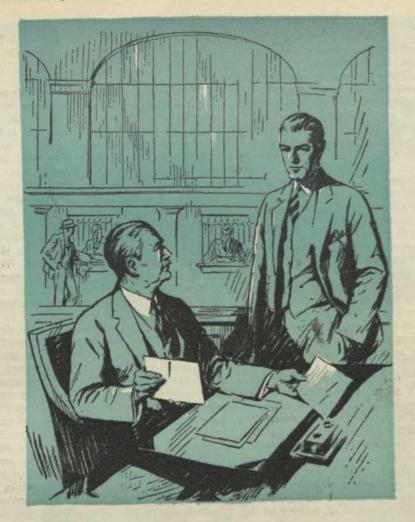
Traffic Problem Settled

DOWNTOWN traffic is a problem in Dallas, as in every other large city. The Boneheads have disposed of this problem satisfactorily on various occasions. At one time they thought that having all streets made to run east and west, altogether doing away with cross lanes, would be the correct procedure. On another occasion they resolved to see that every automobile dealer should give away a bicycle with every car he should sell, so that after an owner parked his machine he may yet ride to his place of business. A third idea that met with wide approval involved the parkings of cars in Fort Worth, 30 miles westward, and coming into Dallas on an inter-

The last municipal campaign, which resulted in a swap of administrations, was one of the most spiritedly contested in the history of Dallas. Five tickets and two independent candidates were in the field, and a run-off became necessary. The Boneheads were not to be left out. They, too, entered candidates and advertised their proposed program in the newspapers.

"This is a spontaneous movement looking to the saving of our city," declared G. McGregor, campaign manager. "We believe in progress without expense, farm relief without federal aid, economy without hardship. We appeal especially to the plug-hat element and the debtor class in general, and invite those of like sympathies to come in from all parts of the state and vote the Bonehead ticket."

The campaign was launched, according to report, at a "mass meeting of half a dozen Boneheads." One of the candidates, running "on a destructive platform," pledged himself to increase street car fares because the car company needs it and so do we." And to catch the male votes he advocated the raising of street car steps 2



"No More Crutches for You, Miller!"

"MILLER, the bank won't help you any more unless you help yourself. Make money or quit!"

"This financial statement proves to me that you don't know the facts about your own business. Go see an I-P stationer and get a system that will tell you every day where you are. No man's business is any better than his records!"

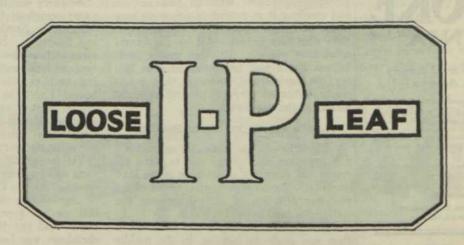
222

In the past few years bankers all over the country have been recommending Irving-Pitt accounting systems to delinquent customers. The results, they say, are more than gratifying. Most retailers haven't time to wade through intricate bookkeeping systems. That's why Irving-Pitt makes "Records That Talk". Plain, concise, easy to use and understand—no red tape. Yet they tell the dealer every day whether he is making money or losing it—and why.

Irving-Pitt records are *specialized* for every business and profession.

Our accountants have prepared a new catalog-manual, "Worth Keeping—Records That Talk." Ask your I-P stationer—or write us for this valuable addition to your library.

IRVING-PITT MANUFACTURING CO. Chicago Kansas City New York





Better Workers Make Better Goods For Less Money

YOUR machines or jigs or molds may be of the very latest and most efficient type.

But the class of labor which operates them will be the deciding factor as to whether your production costs will be high or low.

Roanoke offers you the finest class of labor on earth.

Sturdy, hard-working, all-American stock. Skilled labor in every branch. Unskilled labor, intelligent and quick to learn. Free from imported unrest and discontent.

The kind of labor that would solve many of your present production problems if it were only available in your present community.

18,000 such workers are already employed in Roanoke's 100 industries.

They are producing over \$68,000,000 worth of goods. The industrial payroll of the city, including public service companies, is \$25,000,000 per year.

Additional workers of the same high class are within call when you are ready for them.

In addition, Roanoke offers remarkable transportation facilities; low-cost electric power or coal; easy access to raw materials; strong banking facilities; access to big, prosperous southern, western and northern markets.

Get complete details. Find out why Roanoke has grown from a population of only 400 in 1882 to 80,000 in 1927.

Find out why it has DOUBLED its population in the last seventeen years.

Certainly, you cannot afford to plan your new move without at least investigating the reasons for Roanoke's phenomenal growth.

Write, on your business stationery, for the "Roanoke Brief." It will be a revelation to you.

Write Chamber of Commerce 207 Jefferson Street

ROANOKE



Most Varied Scenery in America

Plan your next motor trip through this section.

Mountains, valleys, turbulent trout st cams, broad rivers, caverns, present a onstantly changing panorama as you guide along highways that cannot be surpassed.

We've planned your routes for you. Send for book "The Log of the Motorist through the Valley of Virginia and the Shenandosh."

CHAMBER OF COMMERCE ROANGES, VIRGINIA feet. He also promised a boost in telephone rates because he "owned a small share of stock in the company." His motto was, "The public be damned."

The candidate for mayor exhorted his hearers to vote the Bonehead ticket straight if they could, and, if not, to vote it crooked. He promised that every mother who voted for the Bonehead candidates would receive for her children a rubber balloon filled with the hot air of opposing candidates.

The candidate for finance commissioner declared himself to be the most qualified man for the office because he was the most underfinanced man in town.

The candidate for police and fire commissioner promised that he would secure portable grandstands and require the fire department to erect them at every fire and wait until the spectators are comfortably seated before turning water onto the blaze.

The entire ticket based its campaign on a platform of frankness. It avowed a desire to double taxes so that there would be plenty of money for the officeholders.

Badly Managed Parade

WIDELY advertised in advance, a "victory parade" was held the night before election day. R. O. T. C. units participated, bands played, a steam calliope shrieked. Great throngs lined the sidewalks, laughed and cheered. But the silk-hat gents were absent. They were not to be seen in the procession. Double-crossing within the organization left the candidates, long coats, long faces and all, waiting on the

steps at the City Hall. The parade ended where they had supposed it was to begin. Just like the Boneheads, said everyone.

Insulted and Like It

WHERE else than in Texas—where men are men, and boneheads are boneheads-can distinguished visitors be insulted and enjoy the sensation? It is the usual thing at this club, when two or more such visitors are present, to indulge in a heated debate as to relative distinctions. It is a set rule that not more than one visitor may have the floor-and that he must be the most important one on hand. After this mooted point has been disposed of, the speaker of the occasion is introduced. With the first words he utters, the club members begin quietly slipping away. Very shortly he finds himself addressing an empty room. It is the richest honor that can come to him. It shows that the Boneheads regard him as a good fellow.

The Boneheads would indignantly deny the charge that they have a philosophy. They would combat any rumor associating themselves with wisdom. Tomfoolery is their business, relaxation their purpose. Prominent in their diverse fields, they come together to get away from the sensible, tiresome things of life. Ruled by the gang spirit, they respond to the law of gravitation which causes water and men to seek their own levels. In this case, the common level is a well-developed sense of humor. If they have a guiding principle, it is this: If you admit that you're entirely ossified, you're not; if you don't, you are.

New Northwest Land Values

By MALCOLM C. CUTTING

THE MOST ambitious and probably the most promising effort that has been made to revive a market for farm land and restore land values to a reasonable level of stabilization is now being undertaken, with considerable public acclaim, in the northwest. In Iowa and in the south, similar plans are in varying degrees of formation.

The northwestern idea is a corporation with an authorized capital of approximately \$25,000,000, organized and designed for the sole purpose of acquiring control of mortgage-foreclosed land in that section and reselling it at moderate prices on long terms to resident tenants and to new settlers who may be attracted by the liberal conditions offered. By this means it is hoped that a real foundation will be laid for the agricultural recovery that is already indicated by the present splendid season in the northwest.

Land's Part in the Farm Problem

A PHASE of the national agricultural problem that seems not to have received the attention it deserves is the land situation. The most disastrous result of the post-war deflation of agriculture was the collapse of land values.

For a generation before the war, wealth that was made in farming in the middle west and northwest was not due so much to the returns from actual farming operations as it was due to the constantly increasing value of the land. During the war period, especially in the Corn Belt, the prices for land attained the proportions of a blue-sky boom.

Like many booms, it developed into a boomerang. When farm prices collapsed in 1920–21, the demand for land ceased. Without a market of any kind, land values steadily declined, and in some sections they continued to decline until an unfathomable bottom was reached.

Nowhere was the collapse of land values more complete than in the northwest—Minnesota, North Dakota, South Dakota and Montana. Nowhere did this calamity seem to have less of economic justification, because land values in that section were not unduly inflated during the wartime boom. Except in certain portions of southern Minnesota and eastern South Dakota—both adjacent to Iowa—there was no appreciable inflation of land values anywhere in the northwest.

Yet from 1920 to 1925 the shrinkage of farm land values in these four states, as reported by the United States Department of Agriculture, amounted to \$2,750,000,000, or an average decrease of 40 per cent. And the 1925 values on which this shrinkage was based were theoretical values. Without buyers, no one could say



Have you ever noticed the time when accidents occur to your drivers?

Careful studies show that the peak accident hour is about 5 p. m.

That's partly because there are more vehicles moving then, but mostly because everyone that is driving is tired.

The new Speed Wagons cut down 5 o'clock accident costs. They are so easy riding, so easy to handle, that Speed Wagon drivers are far less tired at 5 o'clock than other drivers are.

Six-cylinder acceleration, easy steering, and clear vision enable Speed Wagon drivers to slip past danger where a slower, clumsy truck would get caught.

Four-wheel brakes, that take hold smoothly, surely and quickly, stop Speed Wagons when ordinary brakes could not avoid a crash.

Speed Wagons, doing your hauling, will mean fewer accidents. They will save you from the costs of repairing your own equipment, save you from the costs of paying for whatever you might hit, save you the far greater liability if personal injuries occur.

See the new Speed Wagons at your dealer's. Try them out. Learn how they will make your hauling faster, surer, easier, cheaper, and safer.

REO MOTOR CAR COMPANY, Lansing, Michigan

6 Cylinder 4 Wheel Brakes SPEED WAGON

for faster, surer, easier, cheaper hauling

When buying a REO SPEED WAGON please mention Nation's Business

"You're pretty far below quota, Bill



No other visible record system gives an executive such complete and flexible control of

Assets and Liabilities, Summarized. Accounts Receivable or Payable. Sales and Salesmen's Operations. Advertising Costs and Follow-up. Production and Cost Records. Stock on hand or ordered. Credit and Collection.

Why? Because he has these records in compact, portable form-every sheet visible-anywhere from 500 to 10,000 records within arm's

reach-at very reasonable first cost and very low cost of operation.

This method of keeping records has made remarkable headway in large, nationally known concerns since the invention of Brooks Visualizers. If you have not actually seen Brooks Visualizers in use, do not invest more money in "blind" systems or in more cumbersome, costly visible systems of less flexibility.

THE BROOKS COMPANY, 1235 Superior Avenue, Cleveland, Ohio Offices in 67 Cities

Distributors for Canada: Copeland-Chatterson, Ltd., Toronto

The original FEX-SIE Automatic Shift is an exclusive feature of Brooks Visualizers

It was this automatic shift that gave portable, looseleaf visibility its rapid growth. It is part of the mechanism of the back of the book, by which you can instantly insert or remove a record sheet without disturbing others. It takes but a few minutes to demonstrate this shift book. Let us make an appointment for our local representative to show it to you.

BROOKS SUALIZERS FOR ACTIVE BUSINESS RECORDS

Copyright 1927 The Brooks Co., Cleveland

what a farm was worth. There has been

no going price for land.

The effect of this situation, not only upon agriculture but upon business in the northwest, has been tremendous. It is the reason more than a thousand banks have closed in that section during the past six or seven years. Thousands of other banks and business institutions are struggling with a load of farm mortgages, foreclosed or in default, which they cannot liquidate. Outside financial concerns that previously invested heavily in these securities are seriously embarrassed by the same immovable load and have been forced to withdraw or curtail their investments and credit operations in that section.

It is estimated that the value repre-sented by foreclosed mortgages on land in the four northwestern states is more than \$200,000,000. In the great majority of cases, the present owners of this land are not in a position to dispose of their holdings and so liquidate their loans and investments. Holders of mortgages that are in default and producing no income have been unable to protect their investments, either by foreclosure or any other means.

To stimulate a market for this land requires special organization, trained personnel and adequate capital. It must be attacked as a regional rather than an individual problem. There has been no organization or institution in the northwest, public or private, capable of dealing with such a problem.

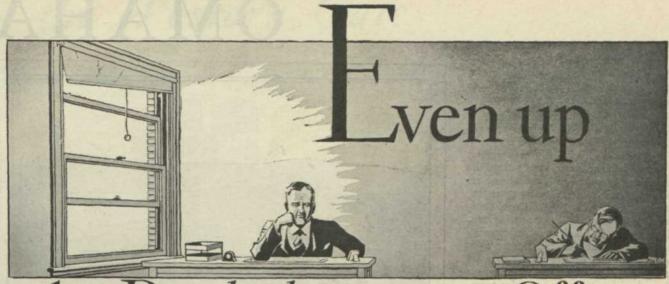
A Bear Market on Farm Land

IN THE meantime, farms have been un-occupied, tenancy is increasing at an alarming rate, and the whole business structure has been disrupted. Yet this landthe tragedy of it!-consists in most part of good improved farms on which thousands of farmers previously were busy, contented and prosperous. It is land which inevitably, as indicated by the present season, will restore the sound agricultural values of the northwest.

And so the Northwest Land and Finance Corporation, with headquarters in St. Paul, Minnesota, has been organized to take over in part this worthy task. It is not a new conception but has been in the making for more than two years. Bankers, business men, state officials and agricul-tural leaders throughout the northwest have been in frequent consultation on the problem. Federal authorities and financial leaders in New York and Chicago were shown the preliminary plan and gave to it unstinted approval.

Late in June a public conference of interested persons was called in St. Paul, with the governors of Minnesota and Montana and a representative of the Ninth District Federal Reserve Bank in attendance. There a preliminary draft of the general plan was publicly approved and adopted. Late in August a board of directors was selected, the company was incorporated under the laws of Delaware, and the Northwest Land and Finance Corporation was ready to function.

The original board of directors consists of five members, a number which may be increased as the operations expand. Howard Everett, of St. Paul, originator of the



aylight in Your Office



increase Efficiency of your Emplo

TNEVEN daylight is one cause of the daily variation in efficiency of your employees. It costs you money.

Avoid bright glare at desks by the window. Eliminate dark shadows in the corners and at locations far removed from the windows. Thus, you overcome the usual fatigue and lack of efficiency caused by eyestrain and eye headaches.

Here is a modern window equipment which overcomes bright glare and dark shadows. Western Venetian Blinds control daylight effectively and regulate its intensity and distribution.

No direct rays of light flash through the windows to distract

attention and fatigue the eyes. All light rays are reflected to the ceiling where they are again reflected and diffused into soft, restful, indirect daylight which is evenly distributed throughout the office. Thus, a new restful environment particularly conducive to steady work is created.

This control of daylight is accomplished by easily and quickly adjustable slats, which also, by the same principle, control ventilation. Air currents are deflected and draft eliminated.

Leading corporations, banks, office buildings everywhere are adopting Western Venetian Blinds because they perform a service of real value. Mail coupon for additional information.

MORE LIGHT~MORE AIR~LESS GLARE

WESTERN VENETIAN BLIND COMPANY

"World's Largest Exclusive Manufacturers of Venetian Blinds"

LOS ANGELES, CALIF., 2700 Long Beach Ave.
NEW YORK, Architects Bldg., 101 Park Avenue.

CHICAGO ... KANSAS CITY ... SAN FRANCISCO ... NEW ORLEANS ... ATLANTA
SEATTLE ... PORTLAND, ORE ... BIRMINGHAM ... JACKSONVILLE, FLA.
Texas Agents: Western Venetian Blind Agency — Dallas, Allen Building;
San Antonio, Hicks Building; Houston, Second National Bank Building.

			ä
1 Dep	stern Venetian Blind Co. pt. N-11, Architects Bidg., 101 Park A w York City, N. Y. Gentlemen: Please send me infor Control plus Ventilation.	Avenue mation on Scientific Daylight	
1 16			
1 5	uiten Fess		
1 1	tibes	Sut 1	
10	Cay		

OMAHA

When Lincoln stood on the heights of Council Bluffs and looked across the Missouri at the little frontier village that marked the beginning of the overland trail, he was already visualizing the sweep of empire westward across the billowing green and golden plains.

But even Lincoln could not foresee the astonishing growth of Omaha!—or its sister, Council Bluffs, already springing up about him! Great buildings, enormous grain elevators, vast stock-yards, with twelve railroad systems pouring the wealth of one of the richest agricultural regions of the world into its storehouses. A city-state like ancient Nineveh rising proudly upon its teeming plains. A great independent metropolis distinguished for its varied commerce and its culture.

LOCATION: Astride the broad trail that leads West; dominating the middle reaches of the Missouri River; the natural metropolis for the vast region that includes Nebraska, Wyoming, and sections of adjoining states—a region more than twice the size of all New England.

POPULATION: Within Omaha's corporate limits, 215,000; within a radius of 50 miles, 500,000 divided among 154 towns and 29,330 farms. All within shopping distance of Omaha and Council Bluffs.

Manufactures: Annual output of packing industry, \$210,000,000. Smelter products, \$46,000,000. Omaha leads the country in the production of pig lead, is third in packing-house products, and is the greatest butter manufacturing center in the world, 55,000,000 pounds. Flour mill products, agricultural implements, bakery products, share largely in the output of Omaha's 600 manufacturing plants.

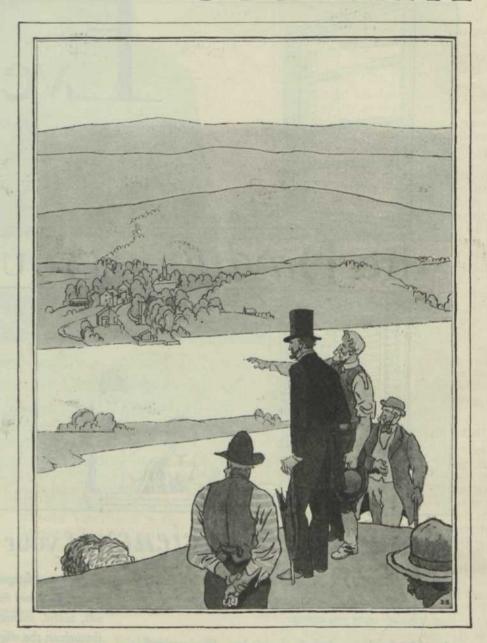
TRADE: Wholesale territory embraces 1500 towns; 310,000 farms averaging 390 acres. Crop value, \$2,000,000,000; livestock on farms, \$1,000,000,000. Bank deposits, \$1,500,000,000. Omaha is leading retail center between Chicago and Denver; annual business, \$157,500,000.

Transportation: Twelve railroads converge at Omaha and Council Bluffs as through a great gate. The chief outlet from Omaha to Chicago and points eastward is the Chicago, Milwaukee & St. Paul Railway.

A natural metropolis

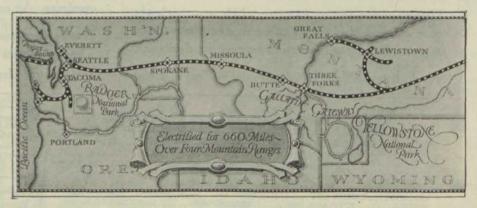
Born on the edge of the prairies, Omaha and Council Bluffs have grown from the richness of an incomparable soil. There is an opulent conservatism about it that has insured steady growth. Living wealth—the value of growing animate things—of an inexhaustible nature is a positive guarantee of Omaha's inevitable progress and expansion.

Omaha's history is rich and varied, colored by the turbulent adventures of explorers, fur-traders, Indian wars, and the migrations of the Forty-niners. It is a city of varied interests, of fine homes, of splendid country clubs, of exceptional educational facilities. With a population over 85% native born American, it is a metropolis worthily placed in the center of the nation.



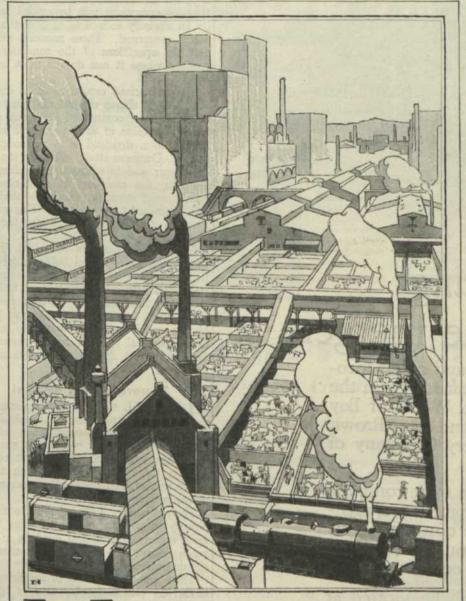
SHORTEST AND MOST MODERN
ROUTE TO THE
PACIFIC AND FAR EAST

The

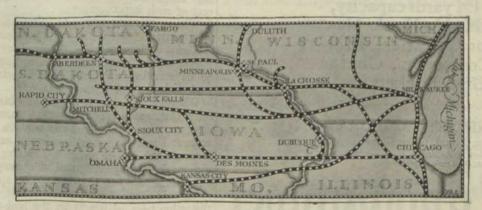


The recognized route between Chicago, Milwaukee and Twin Cities,

-the Western Gate



MILWAUKEE



Kansas City, Omaha, Des Moines, Sioux City, Butte, Spokane, Seattle, Tacoma

A network of polished rails

The run from Chicago to Omaha over the Chicago, Milwaukee & St. Paul Railway is only an overnight interlude in business between these two great cities. Business conferences are often continued on the splendid Milwaukee trains that serve the Western Gate.

The Milwaukee Road not only serves Omaha with a trunk line across golden Iowa, but it serves with equal facility the great metropolis that is the pride of all the Southwest—Kansas City. Its vast system, extending along 11,000 miles of track, operated by 60,000 employees, forms a network linking all important centers northwest of the lower Mississippi Valley. From Chicago to Kansas City, Sioux City and Omaha; to the Twin Cities and Duluth; to Milwaukee and the Upper Michigan Peninsula; to Puget Sound and the Pacific. Spur lines and feeders tap vast resources of raw materials.

The Milwaukee Road is the shortest link with the Pacific Northwest. For 660 miles over four mountain ranges—the Belt, the Bitter Root, the Rockies, the Cascades, to shipside—it is electrified. This is one of the greatest achievements in railroading. Another revolutionary advance has been the adoption of roller bearings for passenger cars—the first time this has been done in the history of railroad transportation.

Splendid trains to serve you

If you wish to visit Omaha on your way to the Coast, the Pacific Limited is the train to take. If you are going to Kansas City, go by the Southwest Limited. The famous Pioneer takes you to the Twin Cities. Then there is The Olympian, the de luxe limited that travels to shipside at Seattle or Tacoma, after passing the most beautiful and diversified scenery in America, through a new empire bursting ripe with opportunities!

ROAD



Chicago, Milwaukee & St. Paul Railway Room 884, Union Station, Chicago, Ill.

Make a check before the region that interests you. We have the closest co-operation with Chambers of Commerce and other business organizations who will supply you with detailed information.

aupply you	with	detailed	17
Puget Sou			
Inland En	Mont	ana	
Kansas Ci		MAIN .	
Agricultu		mtana	

Eastern Dakotas
Omaha—The Western Gate
Minneapolis-St. Paul
Wisconsin

| Agricultural Montana | Iowa | Upper Missouri R. Valle



Announcing the merger

of the two largest and oldest locomotive crane manufacturers in the country, Industrial Works of Bay City, Michigan, and The Brown Hoisting Machinery Company of Cleveland, Ohio.

Building by far the most complete line of similar equipment ever manufactured by one company, this merger offers you unequalled material handling economy.

General offices will be located at Cleveland, Ohio, and products will include Locomotive Cranes of 7½ to 60 tons capacity, Wrecking Cranes 75 to 200 tons capacity, Gas Shovels ½ to 1¼ yards capacity, Bridge Cranes, Heavy Dock Machinery, Creeper Cranes, Pile Drivers, Belt Conveyors, Chain Conveyors and Grab Buckets.

INDUSTRIAL BROWNHOIST CORPORATION

Factories: Bay City, Michigan; Elyria, Ohio; Cleveland, Ohio District Offices: Bay City, New York, Philadelphia, Pittsburgh, Detroit, Chicago, San Francisco, St. Louis, New Orleans

INDUSTRIAL BROWNHOIST

plan, is president and general manager. The vice-president and treasurer is J. Everett Marcell, representing an eastern financial group which is investing heavily in the enterprise.

That the organization has something of a public character is attested by the fact that its operations will be guided largely by an advisory council in each of the four states concerned. These councils will direct the operations of the company into sections where it can do the most lasting

good.

The authorized capital stock is divided into 100,000 shares of preferred and 150,000 shares of common. Preferred stock has a par value of \$100 per share and is limited to a dividend of 6 per cent annually. Common stock will have the voting power and is without par value. In addition, the company is authorized to issue special stock on which the dividend will be limited to 4 per cent. This will be a turnover stock used mainly for the purchase of land.

The difficult question of initial finance was satisfactorily solved before incorporation papers were filed. The company starts out with a subscription of \$200,000 from one financial group, which may be increased at least to \$1,000,000 and possibly as much more as may be needed. Other financial agencies have expressed a similar interest and signified a desire to

subscribe.

Improved Farms, the Goal

HOW WILL the company operate and where will new settlers be obtained? Only desirable agricultural lands will be handled, though the equipment may be somewhat run-down. The secret of the plan is the improvement of such farms, where needed, and their sale at reasonable prices on long terms.

The company will finance reliable tenants already on the land who would like to be farm owners, and it will conduct a campaign designed to attract new settlers by

the desirable conditions offered.

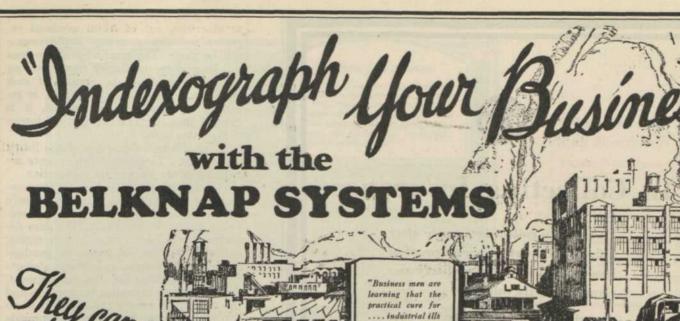
Three general methods of acquiring the lands are contemplated. One is by so-called listing contracts, with an option clause, which will authorize the company to act as agent of the owner on a commission basis and sell the land on long terms. If improvements are needed, the company will be authorized to make them and issue debentures against the land for the cost of such improvements.

Where it is impossible to obtain a listing contract with the option feature, straight options will be obtained at the lowest cash price possible, such option not to be exercised until the land is actually

sold on long terms at a profit.

Wherever possible, land will be obtained on a certificate or contract that gives the company the right to sell the land on long terms. Upon the actual making of such a contract, the former owner will receive special stock in payment, and the company will acquire title to the land. The special stock will draw 4 per cent interest, and the value back of it will be the long-term sales contract.

In such cases the company will be empowered to obtain for the new owner a loan



They can about 40 u

YOUR SALES
CUSTOMERS
PROSPECTS
CREDIT RISKS
PRODUCTION
STOCK CONTROL
PAYROLL DATA
BILLS OF MATERIAL

These and many other facts are revealed by the camera eye of The INDEXOGRAPH.

Availability of information! Accuracy in repetition! Directness, simplicity, economy. The Belknap Systems have helped business in just this way for over forty years. They visualize a business with a camera eye, through the INDEXOGRAPH, which is stencil-and-data-card-in-one. Their ability to do this, as well as to broadcast direct mail speedily and economically, has won them place and prestige in American industry.

Belknap INDEXOGRAPH is daily making valuable information available for publishers, banks and railroads—for theaters, laundries and factories—for mail order companies department stores and smaller specialty shops. Everywhere one finds the useful Belknap Systems, humming at their two-fold task of increasing sales and picturing commercial situations.

Mail this Coupon TODAY

BELKNAP'S LATEST PRODUCT

rests on the availability of accurate information."

n "Nation's Business

The World's Greatest Addressing Machine

WONDERFUL! Read this bare summary and mail the coupon immediately! One operation inks the stencil and does the addressing, too! Address as many pieces as you wish—from one stencil! Skip at will! Or address consecutively! Wonderful indeed! The first and only hand machine with these valuable features, hitherto confined to electric machines—so that now you get all the Indexograph's aid, even with a hand machine.

FREE TRIAL

Ask for Demonstration

Belknap invented the first addressing machine in 1882. It is fitting that the pioneer in his field should now offer to Business a small, inexpensive hand machine incomparably ahead of everything else on the market. It is our privilege to announce great news—your duty to investigate—to see this splendid new addressing machine before you come to any decision.

RAPID ADDRESSING MACHINE CO.

ROSELLE · · · · NEW JERSEY

We Maintain Sales and Service Branches in 42 Cities.

The BELKNAP SYSTEMS
Roselle, New Jersey.

We are interested in your new hand machine. How can you apply Belknap INDEXOGRAPH Systems to our business.

Name of firm

Address

Executive

Demonstration
Desired

Free Trial



In Collecting Insurance

In order to collect insurance after a fire, you must prepare a proof of loss—a list of the property destroyed and its value.

American Appraisal Service prepares this inventory and valuation before the fire.

The American Appraisal Company has been devoted to the making of impartial valuations of this nature for more than thirty years. It has made more than 30,000 such appraisals.

THE AMERICAN APPRAISAL GOMPANY

A NATIONAL ORGANIZATION

Where Does the Retail Dollar Go?

How much is spent for radio, hosiery, cigars, automobiles?

YOU will find the complete answer in "Retail and Wholesale Trade of Baltimore, Maryland." This detailed report has just been published by the Domestic Distribution Department of the United States Chamber of Commerce. It presents the final figures on the first trade census—made in Baltimore by the United States Bureau of the Census.

A mathematical picture of distribution in one of the chief cities of the country. Of value to merchants, economists, manufacturers, advertising men—to everyone who is interested in commercial and industrial growth.

"Retail and Wholesale Trade of Baltimore, Maryland," is a report of 58 pages, complete in every sense of the word. It contains the divisions of retail expenditures in 71 commodities, and is illustrated with charts

Copies of this report may be obtained at 25 cents each

DOMESTIC DISTRIBUTION DEPARTMENT

U. S. Chamber of Commerce

Washington, D. C.

on the land from the Federal Land Bank or otherwise, out of which overhead expenses and any necessary improvements will be paid. The remainder of the loan will be paid to the former owner, retiring his special stock to the amount of cash paid him. Where foreclosed land is returning no income to its owners, it is thought that they will be glad to dispose of it on this basis.

All of this is the function of the listing department. Three other departments are included in the plans of the corporation.

The classifying, appraising and improvement department will examine and classify the lands selected and make such improvements as may be necessary. The sales department will have charge of advertising, publicity, and the solicitation of purchasers. The accounting and finance department will supervise the office management, the financing of individual transactions and the making of federal and other loans to apply on the purchase price and provide implements and other necessary chattels for immediate farming operations.

It is not expected that the price of land will immediately bound to war-time levels as a result of these financing operations. The process is not a miraculous one, and the corporation must move forward neces-

sarily from small beginnings.

Stabilized Values Needed

BUT IT is certain that the selling of just one farm at a reasonable figure tends to revive confidence in the value of all other farms in the neighborhood. As more and more farms are sold, that confidence spreads and market values begin to be restored and stabilized. Assuredly, no more auspicious season than the present one could be chosen for the beginning of such an upward movement in the northwest.

That the plan is sound, as well as novel, is indicated by its recent adoption in other sections where like conditions prevail. As this is written, Iowa is organizing a similar corporation with a personnel including some of the most prominent business and financial men in the middle west. That corporation may be ready to function before this article is read. Louisiana and Texas have both expressed a keen interest in the northwest plan.

The basis of all values, at least in an agricultural region, is land. It is an encouraging sign that business and financial men are ready to invest capital in an enterprise that has for its object the restoration of normal land values. It may be just the impulse that is needed to revive

the confidence of the farmers.

New Taxes for Turkey

BY LEVYING taxes on films and records, the Turkish assembly at Angora has cheered the government with hope of a larger income. Movies and phonographs are popular, and perhaps the duty will not check demand. Tariffs without "favored nation" clauses are no respecters of imports, but official readiness to employ the tariff as a jack for revenue shows that Turkey does not scorn to use one of our old Christian customs.



"It has earned big dividends for 12 years"

"I'd be badly handicapped without my Dictaphone," asserts Francis J. Yawman, of "Y and E" fame

"When I preach efficiency, I like to practise it, and I couldn't if shorthand kept jamming on the brakes," says this prominent executive. Read his other comments, then try his methods yourself.

"WHAT, go back to shorthand! Not unless somebody steals all the Dictaphones. That's how I feel about it—and I'm not a novice at dictation. Commercial shorthand simply can't match The Dictaphone for speed and accuracy, and when it comes to convenience there's no comparison.

"Occasionally I have to dictate to a stenographer in some out-of-town office, when the inconvenience of shorthand becomes doubly apparent. I'm always conscious that someone is waiting, and this diverts my mind. It's infinitely easier to concentrate with The Dictaphone."

Such statements from the Vice-President and General Sales Manager of a firm like the Yawman & Erbe Manufacturing Company—themselves producers of equipment and systems to make office work more efficient—are not to be taken lightly. He continues:

"A big advantage of The Dictaphone is its convenience in getting memos, instructions and ideas recorded. And with The Dictaphone it's so easy to answer letters on first reading, thus insuring better replies, more promptly dispatched, and saving the time necessarily lost when letters are allowed to accumulate for some regular dictation period set largely to accommodate a stenographic force."

Florence Scanlon, Private Secretary to Mr. Yawman, declares, "In my responsible position I couldn't get half so much done if I relied solely on shorthand. I formerly transcribed Dictaphone cylinders, but I soon learned to dictate to The Dictaphone myself—the next logical step, as I see it.

"Today I dictate for Mr. Yawman all correspondence for which I have the facts. I also handle much of his personal business. I think every girl should learn the complete use of The Dictaphone. It is such a wonderful asset in any office."

THE DICTAPHONE

REG.U.S.PAT. OFF.

and double your ability to get things done

What's Wrong With Shorthand?

Executives say:-

- "Out sick, so my letters have to wait."
- "If I could only dictate while it's fresh in my mind."
- "I'm forced to cut dictation short."
- "She can't help me with other things."
- "If she could only take it as fast as I think."
- "It's the 'ring and wait' system."
- "She can't get out all she's taken."

That's enough! I'll send in the coupon below on general principles.



Florence Scanlon

Florence Scanlon, Private Secretary to Mr. Yawman, gives The Dictaphone full credit for aiding her rapid advancement to a most responsible position

What's Wrong With Shorthand?

Secretaries say:-

- "I'm sure he said that, but "
- "No one else can read my notes."
- "Those awful waits while he chats over the phone."
- "Hours wasted while he's in conference."
- "These endless notes make me dizzy."
- "I'm nothing but a bell-hop."
- "No time for real secretarial work."

That's enough! I'll show him this trial offer right now.

MAIL WITH YOUR LETTERHEAD

Dictaphone Sales Corporation 154 Nassau St., New York City

- Please notify your nearest office to let me try the New Model 10 without obligation.
- ☐ I want to read what leading executives or secretaries say about increasing their ability with The Dictaphone.

 Mail me FREE copy of your booklet,

 "What's Wrong with Shorthand?"

I am a Secretary

Executive (Check One)

For Genedian inquiries, address Disturbone Sales Corp., End., 33 Melinda St., Torenta, Canada World-Wide Organization— N-8 Landon, Paris, Brassels, 53 dosy, Shanghai, etc.



Is there a Thought For Your Business

in this New-Found Industrial Area?

Manufacturers seeking a branch plant location in the South; corporations organized to develop immense natural resources; enterprising individuals who appreciate the manufacturing possibilities here—all these "made" the Middle Georgia Industrial Area.

Within the last three years this territory of approximately 100 miles square—of which Macon is the center—has leaped into prominence as a profitable manufacturing district. Manufactured products have increased 30.5 per cent in value; pay rolls, 22.8 per cent; hydroelectric power consumption, 243 per cent.

The same production economies that have attracted other manufacturers may be applied just as effectively to your business. If you are interested in the Southern market, careful analysis of selling and manufacturing costs will bring you to Middle Georgia, for plant location.

For complete information, Address:

CHAMBER OF COMMERCE Macon, Georgia



-Where Production Savings Alone Will Pay Plant Dividends!

Fair Postage Rates, a Myth?

BY ROBERT L. BARNES

N AN article in the preceding issue of NATION'S BUSINESS entitled "What Are Fair Postage Prices?" the writer gave an outline of how and why the postage rates which are now in effect in this country were established in February, 1925. This article dealt with the fallacy of the theory that Congress when it needs more money to pay postal salaries or other Post Office expenses, can adopt the simple expedient of doubling postal rates. Experience with the rate on post cards was used as an example. Doubling the rate did not produce the expected \$22,500,000 revenue but reduced it from approximately \$12,-500,000 to \$4,130,000. The one-cent rate was a saturation rate and the increase practically killed the business.

During the latter part of 1917, when Congress was legislating to raise revenues to win the war, it levied special war taxes on eleven different items of transportation, including freight, express, passengers, first-class mail, parcel post, and second-class matter, the latter covering newspapers and periodicals. All of these special taxes have since been repealed when the war emergency disappeared, with the one exception of second-class mail; and the publishers urge that this should be modified to some extent.

Lower Rates Sought

In THIS article it is not our business to plead the cause of the publishers of newspapers and magazines, and we have no ambition to induce readers to shed a tear for the harassed publishers. Yet from the sidelines there appears to be something in the argument that Congress has failed to complete its job of decreasing the excessively high postage rates which were incidental to the last general postal rate increase. Accordingly the publishers will go before Congress at the next session to endeavor to have the last increase of postage rates whittled down to a fairer scale. The publishers recognize that the pre-war rates would be too low under present conditions and suggest the 1920 base as a compromise between the pre-war rates and the peak charges later imposed.

Public officials who have studied the postal rate question thoroughly agree that the present scale is inequitable. Though no remedial action was taken in the last session of Congress which ended in a filibuster, new measures will be introduced when the national legislature convenes in December.

national legislature convenes in December. It has always been the policy of the Government to encourage the widest possible distribution of literature and, to help in this process, postal rates had been kept low until the last increases. Postmaster General New recently said:

A function of the service of great importance is the transmission and delivery of newspapers and periodicals. These are handled at postage rates fixed with reference to a governmental policy of aid to or encouragement of the dissemination of news and publications devoted to the dissemination of

literature, the sciences and the arts. The importance of this class of mail matter to the maintenance and advancement of our national and social life is evident to the mind of everyone.

Since rates were made low for the furtherance of this policy it was important to see that it was carried out as far as possible. It was important that certain safeguards be placed around the policy's application so that it would benefit the people as a whole. For this reason Congress has provided that the second-class mail matter shall embrace only such newspapers or other periodicals as are issued regularly, as often as four times a year, have a known office of publication and are issued in response to a genuine demand. This means, that it must be published for the dissemination of information of a public character or devoted to the arts and sciences, literature, or some special industry and must be forwarded to legitimate subscribers, that is, the subscribers must have wanted it enough to pay for it.

The public has long been under the impression that the deficits reported by the Postmaster General were mainly due to low rates charged on newspapers and magazines. As was pointed out in the previous article there have been a number of popular misconceptions regarding the source of these deficits, misconceptions which the "cost ascertainment report" did not clear up. In forming its conclusions the public gave no thought to the fact that the low rates for handling and distribution of reading matter were due to governmental policy for the benefit of the people as a whole. No one can deny that this policy has been of incalculable benefit to the nation in building up a mutual understanding and confidence between sections and unifying the nation behind a common ideal.

It is a common impression that the Post Office Department paid out \$74,000,000 more than it received from the publishers in order to transport and deliver newspapers and magazines through the Post Office. But even the Post Office Department does not contend that it actually paid out this sum, nor does it assert that it would save the \$74,000,000 a year if there were no second class. Even under this supposition the Post Office Department organization could not be reduced very materially.

Government Bookkeeping

As WAS explained in last month's article the Post Office Department in arriving at its costs took the entire postal expenditures, including all overhead and other indirect expenses and divided them among the different classes of mail matter and special services, such as money order, registry service, etc., in proportion to their use of the postal facilities. Equal sizes and equal weights of mail of entirely different classes are charged the same rate of expense in the Cost Report, although Con-



PICK YOUR PEN POINT BY COLOR

the problem of pen point selection. The color of the band on the holder tells the whole story. You can now select with confidence exactly the pen point best writing requires.

A fine, broad, stub, flexible or stiff point may be selected at a glance. You can't go wrong.

The merchant who sells Waterman's will be glad to demonstrate. He and we want you to be perfectly pleased.

Ask to See

Waterman's Number Seven

Try all six pen points. Select the one that suits you best.

When you buy a Waterman's you buy perpetual pen service. It will pay you to spend a few minutes in selecting exactly the pen you should have.

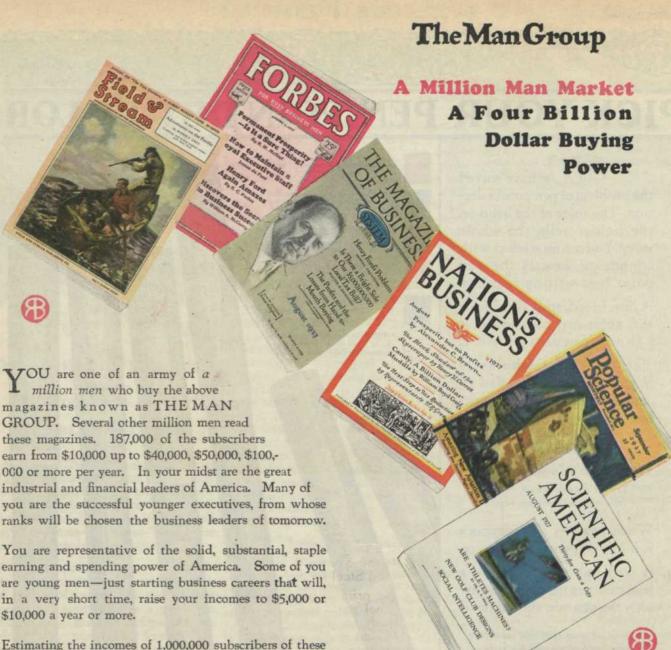
Guaranteed since 1883 and until 1983
—one hundred years of pen service

L. E. Waterman Company 191 Broadway, New York

San Francisco Monti

Boston





Estimating the incomes of 1,000,000 subscribers of these magazines, at the very minimum, according to statistics furnished by Dr. Daniel Starch of the Harvard School of Business Administration for the American Association of Advertising Agents, they are away over Four Billion Dollars. The actual earnings of the readers of these magazines are probably two or three times that sum.

Our purpose is to interest you in this enormous Man Market. For instance, you men buy your own hats—millions of hats; you buy your own shirts and collars, underwear, hosiery, garters, shoes, clothing; you buy your own razors and shaving cream and cigarettes and cigars. You, at least, have something to say about the automobile that goes into the family garage. You buy all the trucks. You buy tires and oil and gas.

Do you, or do you not, have something to say about the kind of roof that goes on your home, bath room fixtures and the furnace?

Without your executive ability, sales skill and earning power, the market in America for all products, whether used by men, women or children, would be reckoned in millions instead of billions; and don't forget that a billion is one thousand million. The readers of the Man Group magazines manufacture nearly all of the merchandise that is made in this country. They advertise and distribute and sell this merchandise.

They also buy a whale of a lot of it.

Will you please write me a frank personal letter telling me what you or your company make; and especially what you personally buy for the family, for yourself and for your company?

Ruggles & Brainard Inc.

ColorPages

The Graybar Building New York City

gress has seen fit to make different rates of postage for different classes. For example, a first-class letter gets direct preferred service, while a circular or open envelope containing advertising matter gets a deferred service, yet the Cost Report charges to each piece, preferred or deferred, approximately the same cost for handling and delivery.

A government report submitted in the manner that this Cost Ascertainment Report was submitted, with the endorsement of certified public accountants, carries a weight of authority that is hard to overcome. No business man, however, would use such a report as the sole basis for his sales prices.

What are the elements that enter into the handling of second-class mail and how do they contribute to the deficit?

In the first place there is the free-incounty service to country newspapers which has been in effect since 1851. Congress willed that country newspapers should be handled free of charge in the county of publication where there is no city or village delivery service. This is an assistance to the small publisher and, in the opinion of Congress, of vital importance to the people served by the distribution of local news and general information. But its cost, which amounts to about \$8,000,000, should not be linked with that of other publications.

Post Office Charity

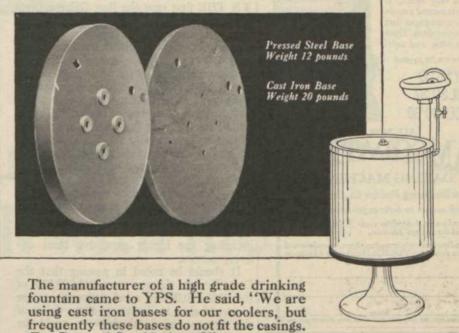
SECONDLY, there are those publications issued by organizations or associations that can qualify as religious, scientific, agricultural, fraternal, educational, etc., and to which a flat rate of 1½ cents a pound applies regardless of the amount of advertising that is carried, and from which none of the net income inures to the benefit of any private individual or stockholder. More than 6,000 of the 29,000 publications entered as second-class mail are admitted to this special rate of postage. The Cost Report charges to these publications \$10,-000,000 of the \$74,000,000 deficit on the whole of second class.

The third group embraces those publications that carry 5 per cent or less of their contents as advertising. These also receive a flat rate of 11/2 cents a pound. The report charges to them \$4,041,000 of the apportioned loss on second class.

This brings us to the fourth and largest group, known as the "zone-rate" class, embracing daily and weekly newspapers and general magazines. According to the Cost Report this group is charged with \$44,500,-000 of the apportioned loss on second class. So far so good, but let us look further into this statement. Doing so we find that many publications in this group actually pay the Government a profit and a still larger number do not contribute to the

Let us see how this situation is brought about. In the first place weight is the primary factor in only 21.5 per cent of the total cost of second-class mail service. This is the cost of transportation. Wages take 77 per cent and the remaining 1.5 per cent is for various other charges. In view of the fact that 77 per cent of the expense charged to second class is for handling the

Better Product! Faster Assembly! Lower Cost!



Can Pressed Steel help us?'

One of the primary advantages of pressed steel is the fact that all pressed steel parts from the same dies are exactly alike and are delivered ready for assembly. Our engineers redesigned the cast part into a pressed steel base that will fit any and every casing for the drinking fountain—which was the definite purpose—and then for good measure delivered the pressed steel base for 20% less than the cost of the former casting and decreased the weight 40%.

Improve Your Product Now!

There may be a way in which pressed steel will improve your product. making assembly easier, saving weight and cutting the cost of some expensive part. All we ask is the opportunity of consulting with you and proving whether pressed steel can cut costs. Such a free consultation may save you thousands of dollars, as it has many of our other customers.

THE YOUNGSTOWN PRESSED STEEL CO., Warren, Ohio Philadelphia — 1314 Franklin Trust Bldg. Chicago — 500 Wrigley Bldg. "Pioneers in Pressed Steel Redevelopment"



Free Book — "Adventures in Redesign" tells how others have cut costs and improved their product with pressed steel. Send the coupon for your copy.

Press It From Steel Instead"	THE YOUNGSTOWN PRESSED STEEL Co., Warren, Ohio Please send me a free copy of "Adventures in Redesign." Name
	Company Street
ADYRE	Town State N.B.11-27



A Tragedy of Errors

FOR twelve years the British coal trade, producing one-fifth of the world's output of coal, was run as a subsidiary branch of the Government. It was surmerged in politics. It became a tragedy of errors.

It cost Britain billions in money, an even greater price in loss of morale. It led to a general strike, a national revolution, to an attempt to rule Britain by a Soviet designed in Moscow.

Herbert N. Casson, British economist, tells the story of this experiment in business socialism in the December number of NATION'S BUSINESS.

individual pieces it is clear that differences in weight of pieces accounts for but slight differences in cost of handling. As an example 25 copies of a publication containing a 25 per cent advertising content and averaging 25 pieces to the pound are transported and delivered to the fourth zone—that is, within a radius of 600 miles—for 25% cents postage on the entire lot of 25, whereas a single magazine weighing a pound, averaging 50 per cent advertising, and addressed for delivery in the fourth zone is required to pay 3¾ cents postage.

Economy to the Small Publication

IN THE first case the Post Office collects postage on only one pound but is called upon to deliver 25 separately addressed pieces. In the second illustration it collects 43 per cent more postage on the same weight of mail but is called upon to render only 1/25 part of the handling service.

To put it still another way the Cost Report charges to second-class mail 71 cents out of every dollar for service in and immediately connected with the Post Office at origin and destination (including delivery) and 29 cents of each dollar to take the mails from one post office to another. It is this situation that enables the Post Office Department to show a profit on some types of publications, even on a pro rata division of the entire postal expense, including the highly expensive rural delivery service.

It should be noted in passing that the Cost Report charges over \$41,000,000 of the \$103,000,000 of rural delivery expense to second-class mail matter; not a dollar of the expense of rural delivery could be saved if second-class mail were entirely withdrawn from the rural routes.

Notwithstanding the enormous "loss" on second class and the inference that second class is getting a tremendous subsidy the records show that from 1920 to 1925 there has been a decrease in the tonnage of the zone rate publications handled by the Government. Why is this? During the same period the weight of all other classes of mails increased tremendously. It is common knowledge that the tonnage output of

practically all publications has been greatly increased, but the publishers on account of the high postage rates have had to find other means of distribution. The least profitable portion of second class is handled by the Post Office while the profitable portion of the business goes to other methods of distribution.

According to the Cost Report for 1926 the publications weighing 4 ounces or less per piece aggregated 2,862,000,000 pieces or 61.86 per cent of all pieces mailed by publishers and the postage collected averaged a quarter of a cent per piece. Sound business judgment would indicate that those publications requiring the most handling per pound would pay a larger portion of the expense but the opposite is true.

It is natural to believe that the Post Office Department would profit from the additional postage from the lesser handling. But this is not the case for though many publishers still use the mails the records show that a large number are now using other means. One of the largest publishers distributes 70 per cent of its entire volume without going through the Post Office at all.

Post Office Has Competition

THERE are several methods of handling publications outside the mails. One is to ship magazines by freight to various distributing points and then put them in the mails as first- and second-zone material. Another is to ship daily newspapers by baggage car to distributing agents. In the vicinity of practically all the large cities newspapers have been compelled to build up their own distributing systems in order to avoid the higher postage rates. Publishers are even going so far as to duplicate the service over rural routes.

Without reference to special pleadings of interested groups, it is self-evident that the present scale of postal rates is not on a sound basis. The rate structure is shot through with anomalies and inconsistencies, which result largely from the contradictory aims of Congress to make the Post Office both a paying agency and an instrument of unprofitable service.

Reducing the Nation's Bank-roll

BY WILLIAM ATHERTON DU PUY

IN A LITTLE while now all the paper money used between Kodiak and Key West is to be different. Mr. American Citizen is to lose that currency to which he, his father and his grandfather were born and get in its place a new brand of a new size with new pictures on it.

It is probable that he will carry this new money in his pocket as long as he lives and that his children and grandchildren will carry it. So will a most familiar thing in the lives of the multitude, a seemingly stable and changeless thing, appear in a new guise.

The Secretary of the Treasury has spoken, and all the paper issues are to be

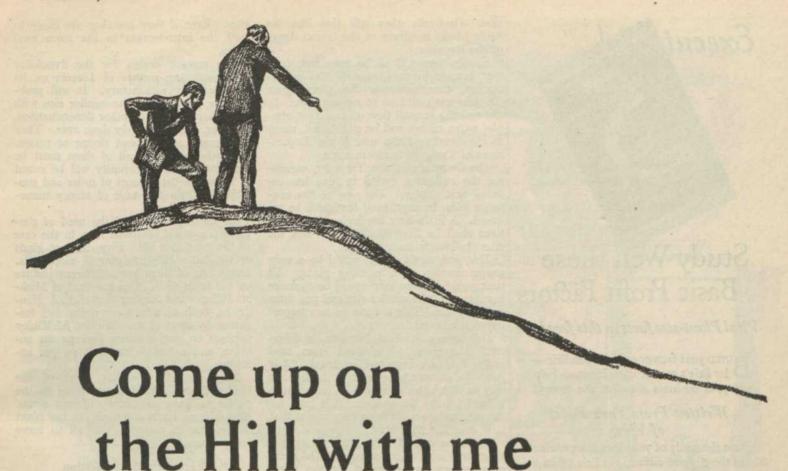
made over.

Not only that, but all the tills in all the cash boxes, cash registers, tellers' cages in

the nation will need to be made over to fit the new money. So will the pocketbooks that are manufactured to carry it. Even the nature of the "roll" one carries in his flank pocket will have to be changed.

The new bills will not be long enough to roll and encase in a rubber band. A new habit of carrying currency will be developed. Even the fingers of the people will have to accustom themselves to the feel of a new agent that helps them to buy and sell.

For four or five years there will be two sizes of money in circulation—the old which is to pass like the horse and buggy because a better vehicle has been found, and the new which will strut arrogantly in the pride of its efficiency. Gradually the big bills will straggle in for redemp-



THE GROCER looks out his window and watches with concern the opening of a chain store across the street.

The ice and coal dealer tosses in bed at night before the challenge of electric refrigeration and oil heating.

The maker of cigars finds food for sombre thought in the rising tide of preference for the cigarette.

Business tragedies in the making? That all depends.

Isolated examples? Well, let's see.

Down the street from the grocer sits a bankergrappling with a chain-store problem of his own.

On the other side of town stands a locomotive works — whose executives are face to face with the spectre of railroad electrification.

In the next city, a wallpaper manufacturer bewails the mode for rough-plaster walls and tinted finishes.

And so across the country—new problems for business rising on every hand: new distribution methods making obsolete the past; new products conquering markets ruled for years; new inventions sounding

the death knell of honored institutions; new competitions in which whole industries are pitted against each other to secure a larger share of the buyer's dollar. And so across the country—business men, big and little, feeling the relentless pressure of a new competition—men who have dwelt in the sheltered valleys of isolated enterprise—now hearing for the first time the threat that rumbles beyond the hills—

-business men, big and little, either falling behind or forging ahead; either struggling alone in the dim half light of precedent or striding forward, alive to the broad sweeps of business.

Nation's Business Magazine says to the American business man:

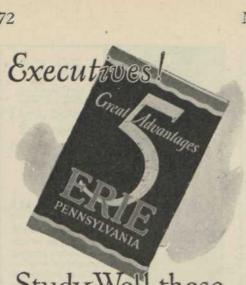
"Come up on the hill with me. Lift your eyes beyond the borders of your own industry. See how others are meeting new conditions just as fundamental and perplexing as your own. Sit with the country's keenest business men as they sense and prepare for the new, the fresh, the unexpected."

Nation's Business is published by the largest business organization in the world. It is frank, human and direct. Its romance is the romance of business, its language the language of your office. If you

are in business you must keep in touch as never before. Nation's Business is edited for you and for its more than 250,000 subscribers with this in mind.



Merle Thorpe, Editor



Study Well these Basic Profit Factors

Vital Plant-site facts in this free book

BUILD your factory or branch in Erie— let Erie's rare economic set-up help put your business ahead of the crowd!

Written From Your Point of View

Base the study of your location problem on the 5 great advantages Erie offersthe basic factors that govern production and sales costs, trade leadership and net profits!

Think of Erie, just overnight from 39 huge markets! Direct rail service! Vast raw material sources close by! Cheapest coal of all lake cities! Labor-skilled, plentiful! Read the full story in "5 Great Advantages"—32 pages of facts, figures, data, charts, graphs.

Send the Coupon

Get this sound book-free! Satisfy yourself. Mail the coupon today!

ERIE PENNSYLVANIA

City of 5 great	
advantages	Great Silvani
A	"ages

advantages Charling	
ERIE CHAMBER OF COMMERCE	Date Date
Erse, Penna. Please send a copy of your booklet "5 Great Advantages."	
Name	
Address	N. B11-1-2

tion. Gradually they will thin like the ranks of the members of the Grand Army of the Republic.

Finally they will all be gone but those that remain in the hands of the numismatists, thus profiting the Government which is not called on to redeem them. In the end the smooth flow of a smaller, simpler paper money will be established, much to the benefit of the user if the Department of Treasury is not in error.

The Secretary of the Treasury, exercising the authority vested in him, has or-dered this change. The size of the one-dollar bills, he says, shall forthwith be reduced. A little later the higher denominations shall be likewise changed. But the ones shall come first.

This, one would think, would be a very simple matter at a printing plant. All that would be necessary would be to make new plates of the smaller size and put them on the press. This is done on newspapers between editions.

This money printing, however, is different. The money is printed from steel plates that are engraved by hand. It is printed this way because it is the hardest way in which the thing can be done. If it is hard for the Government, it is hard for the counterfeiter. It is on his account that it is done the hard way.

Preparing one of these steel plates is a six-month job for an engraver. Only one man can gather around it for the work. That face of Washington on the one-dollar bill; for instance, with its fine detail, its delicate lights and shadows, is carefully cut out of steel by a man with a glass screwed in his eye. The effect of that picture can be procured in printing in no other way than from these engravings.

It will take one artist six months to engrave the face of this new one-dollar bill in the smaller size. In the meantime another artist will be working on the back. The new design will be nearly the same as that now used except for the introduction of some new elements of safety. On the back, for instance, the word "ONE" in large shadow letters will appear. This will make it harder for the note raiser.

After the plates are made a reserve stock of one-dollar bills will need to be produced. The actual tonnage of one-dollar bills in circulation is almost inconceivable. There are something like 900 tons of them out among the people. Those of the old size will have to be displaced by new bills.

Little Dollars in 1928

SINCE the new bills will be but two-thirds the size of the old it will require but 600 tons of them for the replacement. But the production of 600 tons of paper money, considering the infinite care that must be taken with it, is no mean task. It will require six months more after the plates are made. The small size one-dollar bills, it is expected, actually will be put into circulation during the summer of 1928.

In the meantime the redesign and the engraving of plates for other denomina-tions will proceed. There are four denominations now printed that are of little use. These are the twos, the five-hundreds, the five-thousands and the ten-thousands. These may never be done into the smaller

sizes. Even if they are they are likely to wait the introduction to the more used

The present design for the five-dollar note, with the picture of Lincoln on its face, is fairly satisfactory. It will probably be produced in the smaller size with little change. All the other denominations, however, will be entirely done over. They are chaotic and without rhyme or reason. Since the plates for all of them must be reengraved, the opportunity will be seized to introduce the element of order and simplification into this task of money manu-

No better example of the need of simplification could be found than in the case of the ten-dollar bill. Five different kinds of ten-dollar bills are now in circulation. Every one of them has a different picture on the front of it. One has that of Michael Hillegas and another that of T. A. Hendricks, both of whom are quite well forgotten by most of us. William McKinley appears on one, Andrew Jackson on another, and a buffalo rampant on yet an-

They are all ten-dollar notes of the United States, but it is confusing to the public to have so many different kinds. Also it is an obvious mistake at the plant to produce so many models all to serve one purpose.

Pecuniary Simplification

IN THE redesign all the ten-dollar bills will be made alike. The face of one of the Presidents, probably that of Jefferson, or Roosevelt, will appear on the ten. It will come to typify the ten. People will learn to know that denomination by the picture. The tens will be issued in gold certificates and in federal reserve notes. The lettering on them will differentiate between these two types of currency, but funda-

mentally they will be alike.

The pictures of Presidents will appear on all the money-but one picture to a denomination. In selecting the Presidents to appear two considerations have been borne in mind. Those selected should be among the great Presidents. It is an honor to find a place on the money of the nation, which only first-rate Presidents should get. But this is not the sole consideration.

The faces selected should be striking and should be well known. They should lend themselves to steel engraving and they should be easily recognized by the public. The list of the men who will appear on the seven most-used denominations is pretty well settled. It is as follows: Washington, Lincoln, Jefferson, Grant, Cleveland, Roosevelt and Wilson.

The fact that the United States has five different types of currency makes its simplification quite difficult. These types are prescribed by law, however, and the Treasury Department is without power to abandon any of them, with one exception. These types of currency are National Bank Notes, United States Notes, Gold Certificates, Silver Certificates and Federal Reserve Notes. The issue of each has been provided by law. Each is made secure in a different way. The Treasury must issue each. It has worked out its scheme of simplification in the face of this. Here is the



Keeping Rust-fire* out of your home

Rust-Fire takes an enormous toll. Save this waste by insisting on Armco ingot iron for all sheet metal work.

From the furnace down in the cellar to the flashings and eaves on your roof, there's half a ton or more of metal in your home . . . and this metal is burning!

The process is too slow to see . . . but the only difference between rusting and burning with flames and smoke is speed. Both are oxidation; rust is the ash of this slower fire.

But rust-fire takes an enormous toll in costly repairs to leaky roofs, gutters and downspouts . . . in rusted-metal lath and burned-out furnaces . . . and in metal household articles of too short usefulness.

Save this waste and annoyance

by insisting on the use of Armco ingot iron for all sheet metal work in your home.

Because it is the purest iron made, Armco ingot iron is your best ally in fighting rust. It is practically free from the impurities that cause rust in steels and other irons, and no other low-cost metal can equal it for long

You are sure to get this enduring metal if you look for the sheet metal shop in your neighborhood that displays the Armco ingot iron sign. Remember, sixty cents of every dollar spent for sheet metal work is for labor . so it doesn't pay to make this investment in less enduring metal than Armco ingot iron.

And in

More and more execu-INDUSTRY tives are making it a policy to insist on the

use of Armco ingot iron for tanks, stacks, breechings, and all sheet metal work. In every industry, this rust-resisting iron is saving thousands of dollars on repair jobs by putting them off for years. The Armco

Triangle stamped on every sheet identifies the purest, most enduring iron made.

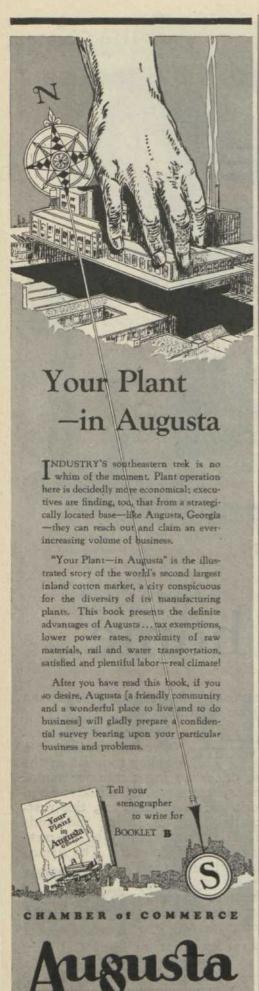


AMERICAN ROLLING MILL COMPANY

Executive Offices: MIDDLETOWN, OHIO Export—The Armco International Corp.
Cable Address: "Armco—Middletown"

RUST-FIRE! The only difference between rusting and burning is time—both are oxidation. You can feel and see the five produced by rapid burning. But when metal rusts, the process is too slow to see. Rust is the "ash" of this fire.

RESISTS RUST



scheme. It plans to abandon the National Bank Notes in 1930. The government bonds that are deposited by the national banks as a guarantee of the redemption of these notes will mature in 1930. They are not to be reissued. The national bank notes will not be put out in the smaller size. They will be allowed to die of themselves in 1930. They are the most complicated and confusing of all the issues.

All the silver certificates will be put into one-dollar bills. That will avoid the confusion producing them in various denominations. All United States notes will be put into five-dollar bills. That removes them as an element of confusion. There remains but gold certificates and federal reserve notes. The higher denominations will be issued in these two forms but with the fundamental elements of design the same for each. This will mean that some twelve models of notes are produced at the plant and circulated for the confusion of the public in the place of thirty-nine types as at present.

Issues Almost Outgrow Bureaucracy

THE Government has been trying for decades to bring about this simplification of its money. The issues had grown of themselves and a stop had never been made to organize them. Studies had been made from time to time. The recommendations for simplification had always been about the same but were never accomplished. Secretary MacVeagh, back in 1911, issued an order which, in general, was much like that of Secretary Mellon, but he went out of office before it was executed, and it died. Now, after a two-year study by expert committees, the thing is finally to be done.

The most revolutionary element in the present order is that of a change in size. Nobody knows how the present size came about. It is an odd size in inches, about 7½ by 3¼. It is not likely that the bills were made this size because of any expert study that showed it to be more convenient than other sizes.

The idea of the new size came about quite by accident and in an interesting way. It has been tested by experts, and its superiority over the larger bills has been established. This study did not take place, however, until after money of this size was in use. The genesis of it goes back to the Philippine Islands, where we were having an experience in colonial government. We had to provide a currency for the Philippine government. Naturally, we wanted to manufacture that currency in our own plant. The bills were designed the same size as our own that they might be produced on the same machines. They were made strikingly different from ours through the use of colors. Elihu Root was then Secretary of War. He objected to the bills being the same size as ours. He sent them back to the Bureau of Engraving and Printing. Could they not, he asked, find a way economically to manufacture them in another size?

The steel plate, the sheet of paper that fits it, and the press that prints from it, are the units of manufacture at the Bureau. Eight of our notes are engraved on one of those plates. The Bureau put

twelve Philippine notes on a plate and the mill worked without further change. Each note was a third smaller than our own.

These Philippine notes, thus accidentally made smaller, turned out in use to be a handier currency than ours. Many people in the Philippines have handled them in a quarter of a century and found them an improved currency. This Government has watched them through the years. It has put them through elaborate tests. It has given them out, for example, to experts in the various Federal Reserve banks, where they have been put through many tests. These banks report unanimously that they are a handier currency than the old.

The people of the United States wear out a billion bills a year, and a billion more has to be manufactured to take their place. These bills are printed from these steel-engraved plates. One impression of the press prints eight of the old bills on a standard size of paper. One impression of the press will print twelve of the new bills on the same piece of paper. It would, obviously, not take as many impressions of the press to print the billion bills needed.

If, under the old regime, it took this plant 300 working days to print a billion bills, it ought, under the new order, to take it but 200 days. A third of the paper and a third of the ink would be saved. Where 1,500 tons of paper has in the past been the annual order, we should now be able to get along with 1,000 tons. Of old we paid express on 1,500 tons of finished money when we sent it out in 12-pound packages to the banks. We will now have to pay express on but 1,000 tons. We paid the same express on worn money when it was sent back to redemption. That express will be cut by a third. From the inside at the Treasury Department the smaller money is a very material saving.

This plant at which the paper money is made, this Bureau of Engraving and Printing, is the Government's prize factory. It employs about 4,000 people and spends nine or ten million dollars a year. It was established fifteen years ago as a model factory, and it was expected that it would be adequate to take care of money production for a century.

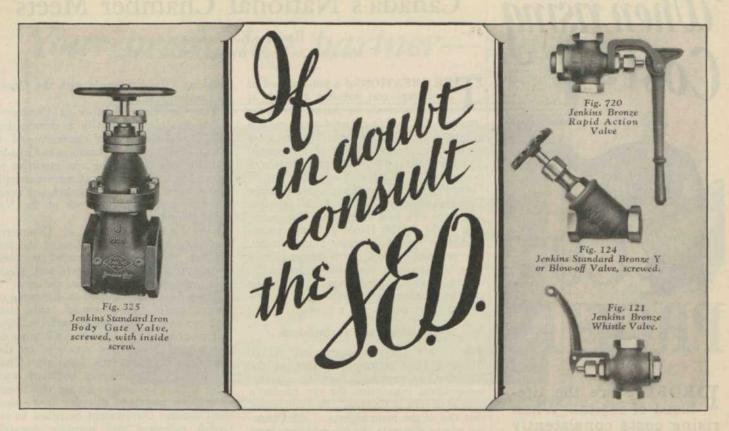
More Money Used Now

STRANGE things, however, have taken place in the use of money in the last ten years. The purchasing power of the dollar has gone down. People are more prosperous than they used to be, get bigger wages, and so buy a greater variety of necessities and luxuries. They carry more money in their pockets. Twenty million automobiles are in operation, and the people who ride in them must have enough money in their pockets to buy gas.

The bulk of the money in use among the people has increased beyond all expectation. The new factory has, for the past few years, been taxed to its capacity.

Now, of a sudden, a new currency is being called into being that is a third easier to make. With the reductions in models to be turned out it may be possible to manufacture twice as many of the new bills in this plant as of the old. These changes are equivalent to setting up a new plant almost as big as that now operated.

GEORGIA





When a puzzling valve installation confronts a plant engineer, intelligent advice may save the expenditure of many dollars. It pays to

install the right valve first, thus avoiding not only double valve cost, but also the time and labor expense and delay of replacement.

Also when valves are part of a piece of equipment intelligent advice may make the difference between performance that wins friends for the equipment and performance that brings only complaints.

If in any doubt, consult the Sales Engineering Division of Jenkins Bros. This is a Department of our business in charge of experienced engineers who are conversant with the application of valves in all industries and their use on apparatus of every description.

There may be types of valves which you did not realize were available, and which are exactly suited for the applications you have in mind. These may be Rapid Action Valves, Y Valves, Whistle Valves, or many other valves in the extensive Jenkins line. It is the business of the S. E. D. to recommend a valve specifically suited to the application.

The S. E. D. has served many engineers and many equipment makers. It is an advisory service which involves no obligation, and which you will find very helpful.





TAlways marked with the "Diamond"

Tenkins Valves

SINCE 1864

2. Jenkins Ivon Body Gate Valve installation in large textile finishing establishment.

 Jenkins Rapid Actie Valves installed on law dry wash wheels.

When rising Costs CUT PROFITS

PROFITS are the lifeblood of capital. When rising costs consistently cut profits, production charts become the handwriting on the wall.

Time then to consider a change.

Investigate the Carolinas, where all the requirements of successful manufacturing at low production costs are admirably fulfilled and immediately you vision DWINDLING COSTS WITH GREATER production.

Many industries have moved to the Carolinas to their greater profit and enjoyment. We can supply you with the facts upon which they based their decisions.

Carolina Power & Light Company





RALEIGH NORTH CAROLINA



When writing please mention Nation's Business

Canada's National Chamber Meets

BY A. E. PARKER

Managing Secretary, Winnipeg Board of Trade

THE CREATION of a joint council of agriculture and industry to meet at stated intervals to discuss the more pressing of Canada's national problems was approved by the second annual convention of the Canadian Chamber of Commerce. Two hundred and fifty delegates met from September 12 to 14 at Vancouver, British Columbia, to discuss the problems facing Canadian business men. Each province and large city sent delegates. Two members of the British House of Commons attended as special delegates from London. The program covered a wide range of subjects, but attention was concentrated on the development of inter-provincial commerce and the need for a definite lining up of agriculture and commerce in a national way.

Nationalism for Provincialism

IN OPENING the convention, S. B. Gundy, the retiring president of the Chamber, referred to it as "the greatest non-political convention for the country's good ever held in Canada." He emphasized that one of the main objects of the Chamber was to eliminate the provincialism from which Canada has long been suffering and substitute for it a non-political national attitude by the business community towards national problems.

Prime Minister Bracken, representing Manitoba, recommended to the delegates that they provide for a joint council of agriculture and industry to meet on stated occasions for the purpose of discussing the more pressing of national problems. He made a further suggestion that a scientific study be made of Canada's tariff. He argued that only by a scientific study of the tariff can its effect on national development be determined. He advocated that un-prejudiced and capable men be chosen from the economic departments of each of the Canadian universities. Mr. Bracken pleaded for national fair trade rather than free trade or the other extreme, high tariff. The recommendation advocating a joint council of agriculture and industry was immediately approved by the delegates, but the recommendation regarding the tariff, while approved tentatively, met with a mixed reception. Manufacturers were not inclined to place too much power in the hands of university men whose theories have not been put into practice.

In leading the discussion on development of inter-provincial commerce in Canada, L. W. Simms of St. Johns, New Brunswick, asserted that drastic adjustments in transportation facilities must be made and that industry, commerce and financial power must be decentralized before national commercial unity will be accomplished.

Capt. A. M. Dollar, the new president of the Chamber, stressed the value of foreign trade and referred to the Orient as Canada's great trade opportunity. He advocated first-hand study of the needs of China and Japan by business executives and prophesied that efficient methods would build up Canadian trade with the Orient to a stupendous figure.

The Canadian Chamber of Commerce enters its third year with a membership of 123 local chambers of commerce out of a total of 400 existing chambers in Canada. It is the intention of the new executive to strengthen local chambers of commerce with a view to creating a firmer foundation upon which to construct the work of the National Chamber.

The Junior Chambers of Commerce movement was discussed. One of the resolutions adopted, recommended to local chambers that they investigate and, wherever practicable, create Junior Sections.

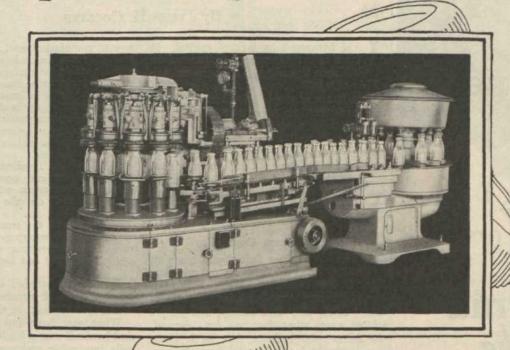
Three days were devoted to discussion of foreign trade, inter-provincial trade, natural resources, immigration and the aims and program of the Canadian Chamber of Commerce. Resolutions approved by the convention included the following: That the Canadian Government negotiate with other British Dominions for the enactment of uniform merchant shipping laws; that the Canadian Government be asked to establish industrial and scientific research laboratories on a large scale at Ottawa; that the Canadian Government be requested to complete the Trans-Canada Highway: that income taxation be further reduced and that duplication of taxes be eliminated; that an immigration policy designed to encourage immigration from Great Britain, Ireland, United States of America and preferred European countries be vigorously pursued and that a national conference of public officials be held with a view to securing a balanced allocation of immigrants throughout the country; that a national survey of natural resources be undertaken by the Canadian Government; that steps be taken to keep as many Canadian university graduates employed in Canada as possible; and that the Canadian Government be supported in any effort it may undertake to stop the diversion of the waters of the Great Lakes by the city of Chicago.

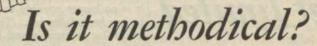
New Things to Steal

E DUCATED rogues we have always had, but there is a grim significance to burglary to get secret chemical formulas. The armed gang that laid siege to a Chicago laboratory and blew open its strong boxes had no eye for money. Their interest in the three-million-dollar concern was focused on something more precious.

A generation ago, most men would have agreed that the way to make a great deal of money was to get control of natural resources. Today the sound advice for a similar purpose has advanced to recommending control of chemical processes. When crooks take that counsel to heart, ethics in its application are not to be expected. Yet the Chicago exploit does disclose that even our gunmen are coming to a more discerning sense of industrial values.

Your producing partner—machinery





ORE than any other trait do you prize the methodical instinct in a business associate—for you know that a methodical person can be trusted to acquit himself thoroughly of all his duties and responsibilities.

And when for "business associate" you read "your real producing partner, automatic machinery", the axiom is self-evident.

Therefore it is not surprising that big dairymen are pinning their faith on the performance of the Lakewest Automatic Milk Bottle Sealing Machine. To watch this almost human assemblage of cams and levers and gears operate does not bring a breathless thrili. Rather one is impressed by a certain humdrum monotonous perfection of motion.

Yet in this very fact lies its extraordinary value. Bottle after bottle, filled with pure, healthy milk, is sealed tightly with a sanitary fiveply spruce paper cap that covers the entire lip of each bottle perfectly and securely.

Economical—of course. And the public benefits. But principally the dairyman is gratified by the trouble-proof, day-after-day operation of this producing partner.

AMF engineers have developed automatic machinery for many of the world's largest industries. Have you a need for their assistance?

AMERICAN MACHINE & FOUNDRY CO. 5502-5524 Second Ave., Brooklyn, N. Y.

MAUTOMATIC MACHINERY (4)



TET this world-famed train or the Argonaut speed your journey through the balmy air and superb climate of the Golden Southwest. Daily from New Orleans to Los Angeles, San Diego and San Francisco, with the Apache Trail as an enchanting motor link along the way.

For the homeward trip have a Southern Pacific representative arrange your return over the

Golden State Route; through El Paso, portal to Old Mexico; via Apache Land, Kansas City, Chicago.

Overland Route; along the American River Canyon and across Great Salt Lake via Omaha to Chicago.

Shasta Route; North via Klamath over new Cascade Line—Mt. Shasta, Portland and the Pacific Northwest.

See the whole Pacific Coast

From Mexico to Canada—Metropolitan Cities — Movieland — Chinatown — quaint Spanish Missions, smiling valleys.

For information and literature write, phone or call your nearest Southern Pacific representative.

New York: 165 Broadway and 52r Fifth Ave. at 44th St. Chicago: 33 West Jackson Blvd. New Orleans: Pan. Am. Bank Bldg. Houston: So. Pacific Bldg. Los Angeles: Pacific Electric Bldg. San Francisco: Southern Pacific Building.



Money May Be the Last Thing Factories Need

By James H. Collins

"T AM hampered by lack of capital. It takes a lot of money to succeed in business nowadays. This is an age of big things."

This is a common belief, often voiced by the man who has a business of his own.

and especially a small business.

Bankers hear it every day, usually as an excuse. Occasionally they have time to point out other factors besides money that stand in the way of success. But that is not the banker's job—besides, he seldom has time to see that good suggestions are

The Business Counsellor

THERE is another fellow who hears it, and gets paid for listening and advising. That is the "business counsellor," and his suggestions are carried out for several reasons. First, they cost money, and people seldom waste what they pay for. Second, the fellow who believes that he is being ham-strung by lack of capital generally goes to the business counsellor in a crisis-he must strike out in a new direction because it is no longer possible to travel in the one he has been following. Third, if a business counsellor is capable and honest, he wastes little time on the client who is reluctant to act.

"Money! I must have more money!" cries the harried manufacturer or merchant, coming to the professional

"Why?" asks the latter, and a few questions show that money is the last thing needed.

"Generally there is enough money in the business already, but it is not being properly employed, or is not working at all," says a Los Angeles adviser of my acquaintance. "We have a curious situation here. Hundreds of new industrial enterprises have been launched in Southern California the past few years, and many are constantly reaching the stage of development where more capital seems to be a vital necessity. We also have hundreds of retired business men, with money and ex-perience, who have tired of loafing and want to get back into something that will give them an investment and an occupation for part of their time. I am the logical fellow to bring them together, but the difficulty is finding enterprises for the capitalists-not capital for the enterprises that my investigations prove to be sound. I am not speaking of get-rich-quick schemes, but of honestly mismanaged enterprises."

When an enterprise is measured by an outsider, it generally appears that no more money is needed for these reasons:

His business should be wound up, because he is in a field that offers no possibilities.

The business is out of balance somewhere -most often in the relation of production to sales. The salesman who does not know how to manufacture and the production man who does not know how to sell, are often found working themselves to death separately. when they would be successful together.

He has plenty of money in his business already, but tied up in slow accounts, goods in warehouses, surplus buildings, and in his speculations in real estate.

The business is making money, but is not

being plowed back.

There is often lopsidedness in the relation between labor and equipment, too much going out for wages, when automatic ma-chinery would do the work better and cheaper.

He has caught the craze for "volume" and thinks that his enterprise must be built up to national proportions, when it is probably a nice individual and local business,

First to be weeded out are the misfit, blind alley and dream enterprises upon which men embark, or think of embarking.

When you have put your whole heart and bankroll into a business that an expert calls impossible and are certain that just a little more money will put you over the top, it is not pleasant to be told that you cannot possibly succeed.

Your first instinct is to declare the expert a pessimist and go ahead in spite of his verdict. Experts have been wrong. Some of the grandest enterprises in the world have been carried through to success after the experts said that there was no hope. But mostly the expert is right.

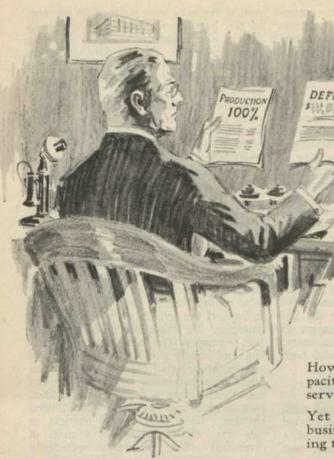
The Pacific coast is a handy dumping ground for many commodities. Foreign manufacturers are restrained from dumping their surplus products in this country, by federal laws, but here at home there are few restraints.

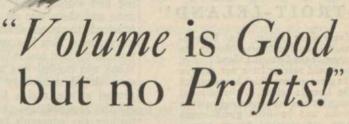
Struggle Against Odds

SO IT often happens that the manufac-turer who believes that a little more money would set him going nicely in some staple industry on the coast has embarked in a hopeless conflict. He makes his stuff from materials brought from considerable distances and is a struggling beginner. His competitors in eastern centers are big, wellfinanced, old heads. They make ten carloads of the product, sell eight in the east at a profit, and dispose of the other two on the Pacific coast at cost and freight. No amount of grit or money will put the western business on a sound footing.

"It should never have been started here," says the counsellor. "You would be richer and happier without your business. Liquidate for as much cash as you can realize and get into something else."

A small manufacturer of dental preparations had a novel product from which he expected big things once it was established in the market. But it involved teaching people an entirely new habit, and that calls for such an outlay in advertising that he was advised to abandon the idea. Money





How often you hear the above remark! Some blame overcapacity or unfair buying, or propose vague remedies that often serve but to muddy the waters of clear understanding.

Yet here and there are executives who go quietly about the business of setting their house in order and succeed in eliminating this condition.

We are constantly serving such executives and the substantial businesses which they direct. Bartlett-Snow Engineers design and build materials-handling machinery which greatly increases the output of the individual workman, and so reduces final costs that present ruinous price conditions may be met without sacrificing profits. At your request one of these engineers will gladly discuss your problems without placing you under any obligation.

THE C. O. BARTLETT & SNOW CO. 6500 Harvard Avenue, Cleveland, Ohio

Bartlett - Snow

Elevating, Conveying, Processing Machinery.

40 Years of Service to Industry















CRUSHERS



"Rooms are larger at the DETROIT-LELAND"

Everywhere today, the Detroitbound traveller hears: "Rooms are larger at the Detroit-Leland." Yet, we would neither have nor deserve the great success which has rewarded the Detroit-Leland, if the physical magnificence of splendid public rooms and beautiful guest-rooms were not matched by an experienced, unobtrusive skill in service

and an inward spirit of hospitality that make old friends of guests. Accommodations for 1200

85% of rooms are priced from \$3.00 to \$5.00 LARGER SAMPLE ROOMS FROM \$4.00 TO \$8.00 PER DAY

DETROIT-LELAND HOTEL Bagley at Cass, Detroit, Michigan

WM. J. CHITTENDEN, JR., Manager
Direction Continental-Leland Corporation



For Manufacturers Seeking West Coast Distribution

Manufacturers who have received copies of "Increasing Sales Through Better Distribution on the Pacific Coast" say it is the finest report of its nature they have ever seen.

If you are considering the Pacific Coast market you may have a copy of the above report without charge.

Send for this Report Today

WAREHOUSE COMPANY

37 Drumm St., San Francisco, Calif.

is the last thing needed when the enterprise is out of balance in the relations of production, sales and finance. Such lopsidedness is often interpreted as lack of sufficient capital. But putting in more money simply makes the business more lopsided than ever. For example:

Some technical men discovered that a certain marketable product could be made from a natural California material which had never had any value. They developed a remarkably efficient process, planning to sell the improved product on quality. But it cost more than an inferior imported product. The stuff is used almost entirely by manufacturers who buy on price. So the technical fellows went on manufacturing and storing until the money was all gone and there was an accumulation of a hundred thousand dollars' worth in the warehouse. This business shut down, and popular opinion had it "for lack of money." What was needed was a sales manager to start skilful missionary work for the improved article, and a finance manager to sell the accumulation at cost, if necessary, turning the concern's frozen capital back

Some Plants Built on Sales

THE Pacific coast has hundreds of small manufacturing enterprises which started out originally under the ownership of a salesman. The traveling salesman, well acquainted in the grocery trade, or the drug trade, or some other line, would set up a small plant for making a food specialty, or a remedy, and build business on his ability to sell. Sometimes the product required little technical skill in manufacture, and again the salesman would buy a small factory which had been carried through the manufacturing phase but failed to sell its product.

"When you find a salesman, a production man and an accountant working together," a chamber-of-commerce investigator tells me, "the enterprise is usually successful, even though it be small. Not once in fifty times will such a combination need outside help in solving its problems. It is just as good a combination if the ownership is centered in one of the three specialists with sense enough to employ the other two. The salesman alone may go far without the other two if his product is not complicated in manufacture and he sells enough to finance expansion. But the production man or the accountant alone are likely to get into trouble, because the whole trend of business today is toward distribution."

Here are some examples of lopsidedness:
A small concern had gone too far in selling because the dominating brains were of that kind. A large investment had been lost in the endeavor to cover too much territory with an unknown product. This business was taken over by a man with accounting experience. He collected bad debts, cut down injudicious credits, limited sales effort to an area small enough to be covered thoroughly, and has made a paying business without additional capital.

More money seemed to be needed by a wholesale concern which had prospered in the past but was now losing ground. Analysis of customers showed that 80 per

cent of the sales were made to 30 per cent of the purchasers. The rest were small buyers who might be "nursed" along by patient salesmen. On the sales staff there were only two men of the right type for such constructive work. The advice was to let these two men start a business of their own and have the small customers, while the 30 per cent of large purchasers were kept as the foundation of a better business—and this plan has worked out beautifully.

The ability to raise plenty of money, enjoyed by many large concerns and envied by the small fellow accordingly, is proving this principle of lopsidedness in a curious way.

This is a period of falling prices and increasing sales resistance. In some lines, especially the manufacture of equipment, one big manufacturing corporation selling to another in competition with rivals will raise capital through bond or stock issues to buy out the corporation which is a good customer. No longer is it necessary to sell that customer—the company now owns him and simply delivers its product and competitors are shut out. But the concern which was purchased by large financing may manufacture a dozen different lines, each of which must be sold. When several customers have been bought outright in this way, there accumulates a mass of diversified selling that must eventually create a serious problem. It is quite a common form of consolidation just now, but may lead to serious lopsidedness as the price reductions continue.

The other day I heard a story illustrating

just the opposite policy.

A retired easterner got bored with golf and decided to get back into business in Los Angeles. He made a careful investigation and chose a concern which, in the past dozen years, has grown from a one-man business to a corporation employing a thousand people. This growth has been due to two factors: The original owner is an engineer with high technical ideals and has spent money in research as fast as he made it. He is also an excellent salesman—so good that during the early years of the company practically all the sales were made by himself and the business involves large contracts.

Plenty of Money

WELL, that seemed a safe enough business for the retired easterner, who was a man of note in his own line before he came west. So he let the western concern know that he had decided to cast in his money and his ability—only to be told that the company was adequately financed and did not need him or want him. Needless to say, that concern has balance in its various departments and its general policies.

There are various rat-holes in every business, and down those the business coun-

sellor looks first for money.

"Accounts Peceivable" is a famous old rat-hole, often lined with money. It is a curious point that the proprietor of an enterprise in difficulties will be scrupulous about paying his own debts but lenient with those who owe him money. It is shortage of cash to meet his bills that drives him to the conclusion that he must

have more money to carry on. One look down the rat-hole of "Accounts Receivable" prompts the question, "Why don't you get after these slow-pay customers and make them provide the funds you need?"

Letting your customers run behind in their payments is letting them use your money to do business-everybody knows

Another rat-hole is the inventory-goods made up and in warehouse, excess raw materials, surplus machinery and tools, and sometimes even the scrap-pile.

In New England, a cotton manufacturer had some old equipment, obsolete for his purposes. He sold this to a second-hand dealer at what seemed a fair price but later heard that the dealer had sold it again for six times as much to another cotton manufacturer who saved money over the price of such machinery new. This led to the forming of a used equipment bureau among manufacturers, who list whatever they may have to sell. This bureau has listed constantly a couple of million dollars worth of equipment and regularly sells to textile mills all over the country. In effect, it is a scrap-pile bank with assets of that much money, upon which manufacturers draw for money needed in carrying on their businesses

Unnecessarily large inventories of goods and materials are a common thing today, although gradually falling prices and the much-discussed "hand-to-mouth buying" favor just the opposite condition. Working closer to the real demand offers literally hundreds of opportunities for releasing money.

Real Estate Hampers Manufacturing

"REAL estate" is a significant item in R western balance sheets. More than one manufacturing enterprise which was supposed to be making money has proved, on analysis, to be in the real estate business rather than industry, its capital tied up in a plant site held for increase in valuation and its profits coming from sales of real estate instead of goods.

"Either sell your surplus real estate and put it into the factory," was the advice of a business counsel in one such case, "or get rid of your factory which hampers your real estate operations."

"Look in the rat-holes!" says the business adviser. "If the enterprise has reached an age of even two or three years, there will be corners where money has stagnated and can be recovered. If it is a brand new concern, the proprietors may think that they need more working capital, but the chances are they must pass through a period of making mistakes, and the wisest course is to make their mistakes as cheaply as possible. If they have slender resources, they will learn without losses, while if somebody stands ready to put up all the money

they can lose, they may never learn at all."

Among the rat-holes from which it is hard to recover much working capital, although plenty of money has been poured down, is the one of outside spending for show.

The manufacturer or wholesale merchant needing funds to meet his own obligations finds that certain customers to whom he sells are in arrears. Apparently prosperous, yet they complain that they lack money



Check protection at three vital points is provided by Safeguard—automatically, unfailingly! It is literally true that "You can't be Careless with a Safeguard!"

1. Writes EXACT Amount in WORDS.



2. AUTOMATICALLY protects Payee's Name.



The same operation that writes out the amount in acid proof red ink, shreds the Payee's Name and the amount as written in figures. It's automatic—"You can't be Careless with a Safeguard."

3. Amount is ALWAYS written in ONE line, full width of check; eliminates danger of raising by additions.



Waukesha-Motored, Doane, Trackless Tank Car Train



a-741-M

Economic Handling of Gasoline

this way takes economical and adequate power

IN CALIFORNIA the handling of gasoline is a different problem. Economies can be practiced there because of the tremendous consumption, and the proximity of refinery and filling station. By a single handling, the users of these trackless tank car trains can deliver gasoline direct from refinery to filling station tank with the minimum loss. In Wisconsin, milk is handled in a very similar manner.

DOANE, the builder of these special type truck and trailer chasses, has made a great contribution to the economic handling of liquids over the roads. He chose Waukesha "Ricardo Head" engines to power these trucks because of their proved fuel economy, high power and freedom from trouble.

LOADS like the above, 57,000 pounds for the whole train, with a capacity of 4900 gallons of gasoline, require a sturdy, reliable engine to maintain economic road speeds. Over twenty years' experience building heavy duty gasoline engines to serve thirty-two different kinds of industry has developed an organization that knows how to design and build them.

YOU MAY BE INTERESTED only in the purchase of gasoline engined equipment. It may be a bus, truck, power shovel, concrete mixer, road building machine, air compressor, water pump, oil drilling rig or combined harvester. If it has a Waukesha "Ricardo Head" engine, you will find a product distinguished by the service it renders rather than by the price at which it sells.

PERHAPS YOU, TOO, have a "Fringe Market" and wish to build a unit requiring economical, portable gasoline power? We can furnish engines or completely enclosed power units varying in size from 20 to 125 horsepower and our engineering advice is yours for the asking without charge or obligation. Just have your secretary put this in the mail with your card. We will do the rest.



HEAVY DUTY GASOLINE ENGINES

WAUKESHA MOTOR COMPANY

Waukesha

Wisconsin

Exclusive Builders of Heavy Duty Automotive Type Gasoline Engines for Over Twenty Years

to carry on business. Credit investigation shows that they are borrowing in rather shifty ways and carrying obligations with finance companies. Their shops make money, but they are "keeping up with the Joneses," buying expensive articles on instalments and, altogether, providing material for a sermon on the degeneracy of the present business generation.

A business may be out of balance in its relations of plant to payroll; that is, it is paying out every week, in wages, a lot of money which should be invested in machinery. This situation is tolerated because the payroll is moderate, though relentless in coming around each week, while the capital sum required for investment in new equipment seems staggering. But fixed charges are the smallest item of running expense in most business enterprises, and wages are often highest. More equipment would be equivalent to hiring machinery to do the work for lower wages, and when this became clear and was adopted as a policy, the financing of the new equipment would not be difficult.

Finally, there is the "craze for volume," one of the commonest reasons for seeking

"I must have more money," says the business man with a tidy local or regional enterprise.

"Why?" asks the analyst.

"To increase my production and cut my manufacturing costs, to extend my sales over wider territory and reduce my distribution costs."

"Volume" Not Essential to Success

BUT investigation often discloses poor employment of the capital already in the enterprise, along the lines described above, and even if the business is well managed, big-scale production may not be the right thing. This is a day of big organiza-tions, true. But probably never before were there so many tidy little local and individual enterprises making money. "Volume" is in the air and the thoughts turn to it naturally as a panacea when business goes wrong, when there are reasons to doubt whether it has always been beneficial.

Great consolidations have been effected for financial profits rather than production economies on the basis of what it was hoped could be earned, rather than what had been earned in the past, and the hopes have not always come up to the charges on the investment. The big concern has correspondingly large rat-holes. There are plenty of drawbacks to "volume" as it is actually embodied by Big Business, but these are not yet seen as clearly by the public or the individual business man aspiring to expansion as they are by experts who have studied Big Business during its first generation.

In a California suburb, I buy various articles from an Italian grocer. He is a great fellow to ask questions about current events, and a merchant who takes pride in carrying what his customers want. So one day I suggested that he was the kind of man who might have a big city store and

do a Main Street business.
"Ah, no!" he protested. "Not on your life! I had the beeg store in the city and four clerks to wait on the customer. I

cannot watch the beeg store all the time. Them fella they steal from me all the time. I have the beeg store, they make the mon. Now, here, I gotta leetle business. Me and my wife, we wait on the customer. I own this lot and this building, and the lot next door, and the next lot, right up to the corner. Some day that property is going to be valuable—don't you think? Why should I work my fool head off for the beeg business when I can sit so pretty?"

"Volume" seems like the way out. But it is seldom so. Even the big consolidations of business have not been as successful as people imagine. Their wonders are reiter-ated until folks come to accept them as magnificent enterprises. But the failures of consolidation are forgotten-failure never

has a press agent!

The "volume" argument sounds a little crazy when the small fellows run over the

"My business doesn't pay now, because it is too small. If I had money, I would make it bigger and make it pay."

Which sounds like the famous store

where everything was sold for less than cost and money made on the huge turnover.

Some of the big consolidations have flivvered because management did not measure up to magnitude. The manufacturer might be swamped in a bigger enterprise or the products he manufactures may not lend themselves to mass production and so on through the basic reasons that have been found for failure.

And so money is the last thing needed there, and because nobody finds a profit in promoting little enterprises into big ones, hundreds of tidy proprietary and partnership concerns struggle through their teething troubles and become quietly and locally successful.

"I want money to expand nationally" is another ambition of the same kind, widely held nowadays.

Local Business Predominates

PICK up the local telephone book and run through the business-guide section and you will see that by far the greater proportion of business is local or regional in character. The products that can be distributed over the whole country are few, in comparison. But their fame is great, like that of the big consolidations. So men make a local or regional success of their enterprise and then aspire to national expansion, and all they need is the money to bring it about-they think.

With all the talk of bigness, you can find in every community an increasing number of folks who like the little business. In a region such as the Pacific coast, they favor the small local concern against the great national concern, other things being equal, because the small concern belongs to Bill, whom they know and who employs folks in

the community.

Therefore, in trying to raise capital to make himself big, many a man with a promising enterprise is traveling toward

The fact about money is that it constantly hunts work with a boss competent to pay fair wages in a steady job. The ability to employ money intelligently brings it around seeking investment.

A new degree of comfort has come to America's homes

Summer heat and winter cold are shut out by this amazing building material . . . fuel bills can be reduced one-third.

HERE is no excuse, now, for building homes that are unpleasantly warm in summer, or chilly and damp in winter.

A building material has been developed that resists the passage of heat and cold to a remarkable degree. Homes that are protected this modern way are more pleasant to live in at all seasons of the year.

Home builders everywhere have quickly appreciated the advantages of this better way of building. All types and sizes of homes, from the smallest cottage to the stateliest mansion, have been made more livable. For Celotex, the material that makes this new comfort possible, adds little or nothing to building costs. Every home can easily have its protection.

The slight extra cost of building with Celotex is soon repaid, many times over. Its protection brings definite economies as well as comforts. Built into walls, ceilings and roof, Celotex prevents the escape of valuable furnace heat and greatly reduces fuel bills. One-third of your fuel money can be saved, year after

More than 195,000 homes have already been made stronger, cooler in summer, quieter, warmer in winter, less costly to heat, with Celotex. Every year more builders are using this modern material. America's demand for comfortable homes is

constantly increasing.

Before you buy or build, get complete information about Celotex. Ask your secretary to write for the Celotex Building Book today.

FOR OLD HOMES, TOO

IN houses alreadybuilt, Celotex lines attics. Here, it will make your home cooler in summer; warmer in winter; add an attractive extra room; and save more fuel money than it costs. It is also used to line base-ments, garages, and for remodeling work.

THE CELOTEX COMPANY

Chicago, Illinois
Mills: New Orleans, Louisiana
Branch Sales Offices in many principal cities
(See telephone books for addresses)
Sales Distributors throughout the World
Canadian Representatives:
Alexander Murray & Co., Ltd., Montreal All reliable lumber dealers can supply Celotex



This Sign Will Guide You

to houses that are well built and to builders who build well

For the hardest or the easiest job NEWSTEEL SHEETS

Not every job requiring steel sheets is a hard one. But the easy job for one steel sheet may be very hard for another. Having the right steel sheet for the right job makes a lot of difference in results.

By insisting on Newsteel Sheets-good steel sheets -and definitely specifying the conditions and operations, you can make sure that all jobs will be comparatively easy.

The results will be uniformly satisfactory, too-and that means money, time and endless trouble saved.

As a guide to the right steel sheets, get a copy of the Newsteel Catalogue-and read it. Free? Of course.

THE NEWTON STEEL COMPANY

YOUNGSTOWN, OHIO

Chicago Cleveland Detroit New York

The Newsteel Engineer's job is to save you mistakes-before you make them. He has the support of an organization of sheet steel experts in his work.





Distribution to the Small Town

WHAT is the use of advertising a prod-uct that can't be bought? In other words, can nationally advertised goods be bought in small towns? Only occasionally, is the answer of one woman in a small town. She had to go to three towns before she could buy some Valspar. How many people would carry a search that far and how much of a market are national advertisers missing in not covering the small towns more thoroughly? How wide should distribution be? Can the small town be profitable to the national advertiser?

Publicity Sometimes Wasted

A LETTER from Alice Hancock of Mt. Vernon, Missouri, presents this problem from the point of view of the woman in the small town.

"There is such a waste in national advertising from the standpoint of the consumer that it seems as if the manufacturers would do something about it. This waste lies in the fact that the consumer, even though convinced that he wants a certain article, does not know where to get it. A few will tramp the streets asking at every store for what they want, but most people are discouraged at the attitude merchants usually take concerning anything they do not have. They either act as if they had never heard of the article in question or else say it is not as good as the brand they carry.

"For years I have studied the magazines, decided I wanted a certain product, had the money to spend, but could not find a

place to buy it.

"It is embarrassing in a small town always to be asking for something your merchant does not have. Perhaps the one across the street carries what you want, but you don't know it unless you happen to go in his store. One remedy for this state of affairs would be more cooperation on the part of the merchants.

"However, even this would not solve the difficulty, as there are many products that no small town merchant can afford to carry. These require a city trade, but there are some people living in the country or small towns who can afford them and want them. The city merchant who sells these products should let all prospective customers know he has them.

Advertising to Help Advertising

"SUPPOSE a group of national advertis-ers combined and divided the country into trade territories centering in a large city. The people who take an intelligent interest in advertising and have money to spend usually take a big city paper, wherever they live. Now suppose that once a week, preferably Sunday, an advertisement appeared giving the name and trade-mark if possible, of each of the articles in the as-sociation, and under these a list of the stores that carry the product.

"If I want to buy a Frigidaire or a pair of Ground Gripper shoes, I can look in the Sunday paper and find out which of our own dealers, if any, carry them, or the nearest town that has such a store."

A Better Way to Get Factories

"FACTORY Grabbing" has assumed the proportions of a new industry itself. In the American Machinist an article, "Attracting New Manufactures," by A. W. Forbes, presents an interesting phase of this activity.

All are familiar wih the circulars and letters that chambers of commerce get out to attract industries to their towns. I have just received a similar circular from a large terminal company, which may not be typical, but which brings out the weakness of these circulars.

Buildings, insurance, gas and electricity, shipping facilities, are all described. It makes an attractive picture, but after all they are only minor items. The big item of costs is employes' wages. Not common labor, but the skilled employes.

I do not recall a single circular advertising a town that described the facilities for living in the same way that they describe the shipping facilities. It is natural that factories already located in a town might not want to advertise that their employes were available for a newcomer. But there is one class of employe that they might be willing to advertise, the coming generation. We might expect that these circulars would tell what the town is doing to prepare the younger generation for profitable employment, but they never do.

Is it safe to assume that a town that fails

Is it safe to assume that a town that fails to suggest that it is helping the younger generation toward skilled employment is doing nothing alone this line? Some towns are doing practically nothing. But who would want to locate in such a town?

Other towns like the one where we are located have extensive programs for vocational education. It must be a great help to those industries that need the kinds of employes that the schools prepare, and in general that means the large plans with mass production methods. But we do not happen to be one of them. The vocational schools are the worst competitors of the small shop.

Is there no town that is trying to cooperate with all the industries so that every boy will find congenial employment at the highest level of accomplishment, and so that every skilled job or responsible position will find some member of the coming generation to fill it? Of course, this ideal cannot be secured. But some town might try to come as near to it as possible. I do not know any stronger inducement to locate in a town than such a plan of cooperation.

Educating the Public

BY ITS decision to make the good name of wood more of a household word, more of a housebuilding word, the National Lumber Manufacturers' Association shows that it is wideawake to the vigorous competition of other structural materials. Educational in its purpose, this country-wide spread of printers' ink is to continue for five years, at least, the trade extension committee announces. With the resources of so great an industry available for informing the public, it is only reasonable to expect a better understanding of the present and possible uses of lumber. One thing is sure, once the campaign gets going, whoever knocks on wood will put himself in position to hear something to its advantage.



View from St. Petersburg's Municipal Recreation Pier

Now-First in the South in SPORT Attractions



St. Petersburg, "The Sunshine City," now leads the South in the variety of outdoor sports which its winter visitors can enjoy. There are all kinds of fun for old and young—everything from

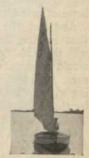
golf to shuffleboard, from yachting to archery, from dominoes to aviation.

To be more specific, St. Petersburg now has a million dollar municipal Recreation Pier, two municipal bathing beaches, four 18-hole golf courses, three splendid yacht basins, three riding academies, an aviation field, a great free causeway to the Gulf beaches, and 322 miles of beautiful paved streets.

It now has in its municipal parks 20 shuffleboard courts, 9 roque courts, 7 tennis courts, 2 large lawn bowling areas, 48 horseshoe pitching lanes, quoit courts, outdoor basketball court, baseball diamonds, football field, and even an open-air club-house for chess, checkers and dominoes.

There's something to do and something doing on every sunny day in St. Petersburg. Free band concerts twice daily. Big League baseball. Regattas. National roque, lawn bowling and horseshoe tournaments. Festival of the States. Boxing bouts weekly. Concerts, lectures, theaters, dancing. In fact, almost anything you could desire.

Old-time hospitality. Ample and excellent accommodations. Moderate living costs. Write today for our 24-page booklet and special sports booklet. Mail the coupon below.



M. M. CONANT, Chamber of Commerce, St. Petersburg, Florida. Please send me a copy of your General Booklet Sports Booklet
Name



What the World of Finance Talks Of

HINDSIGHT is a human quality which is always quoted at

By MERRYLE STANLEY RUKEYSER

Fortunately, men of business in recent years have become critical of the stock market as a barometer of business condi-

a discount. The habit of looking back over the security price advances of the last three years and expressing vain regrets at the failure to participate in the upward surge is becoming general.

A tipping service—and, despite the new sophistication of investors, the soothsayers still thrive in bull markets—in a circular which has come to my desk asks rhetorically, "Have You Been Awake to the Easy, Safe, Sure Profits in the Stock Market? Has lack of definite knowledge kept you blind to a situation which has made possible, practically without the assumption of risk, profits of 6 to 149 points?"

Apparently there is still a livelihood to be gained in exploiting the ancient falla-

In its search for subscribers, this agency—and its appeal is typical—disseminates economic absurdities and charges a fat subscription fee for nonsense. In the first place, there are no "easy, safe, sure profits in the stock market." The essence of speculation is the assumption of risk, and, if risk is removed, there can be no speculation. This truth is elementary, yet many fail to grasp it. Bernard M. Baruch once remarked in conversation that, though the fact that two plus two make four is simple, it eludes many.

The quest for "safe speculation" is as fruitless as the search for the fountain of youth. The social utility of speculators is that they are the risk bearers of society, who voluntarily assume hazards in the hope of attaining large and quick rewards.

And yet the public superstition exists that insiders know precisely what prices will do. If the facts were known, they would constitute a delicious comedy of errors. Insiders, although sometimes playing with loaded dice, are frequently blinded by their enthusiasm. They often react uncritically to advance information.

One of the greatest personal fortunes, snatched out of the fires of Wall Street speculation, was developed by a man who was always on the outside, usually playing a lone hand. Sometimes astute outsiders have more acumen in judging the future outlook of a business than its own officers and directors.

Prior to the passing of the dividend by the American International Corporation during the post-armistice deflation, the unfavorable development was forecast in a drastic decline in the price of the shares. Financial reporters asked the president if the dividend was in danger. He said it was not. Months later the dividend was omitted and the news purveyors suspected duplicity. As a matter of fact, the president, in the earlier interview, had been candid, though mistaken. The price decline reflected a torrential wave of short selling by an operator on the outside, who was better able to read the signposts of the future.

Successful speculation through the years

is rare. Several of the present speculative leaders had earlier in their careers suffered major reverses. Successful speculation depends upon a capacity to think independently and to act instantaneously. The naïve follower of second-hand tips might make a few lucky strikes, but only accident would keep him from ultimate loss. Speculation is an individual art, and venders who offer to "unlock market treasures" are arousing false hopes. As a matter of fact, even the reputable, quasi-scientific forecasting agencies have had an especially bad batting average in the last eighteen months. Nearly all of them were premature in announcing that the upward movement was over.

Speculation deals largely with the future and, accordingly, is based on surmise as well as on facts.

Extraordinary judgment is richly rewarded, but the sucker public gains little except experience.

THE PROLONGED upward surge is in many respects unprecedented. New and unusual factors render the old yardsticks obsolete.

I was recently discussing this subject with a nationally known economist, who proved his theories at the market place and built up a huge fortune. He admitted that he was frankly puzzled by the present situation. "If I were a financial writer," he remarked, "I would not know what to write. I don't think I would write anything until my views became better crystallized."

Stability in business is unfavorable to speculation, which thrives on ups and downs.

With business stabilized, speculation has tended to develop along more subtle lines. There has been an attempt to single out and favor the dominant companies which are best able to succeed under the new and heightened competition. Accordingly, for months, some shares have been rising, while others have been falling. There has been no opportunity to buy or sell the board. Bull and bear markets have been progressing simultaneously, depending on the stocks held.

Thus the stock market has paralleled the world of business, which has been subject to contradictory cross currents.

With business stabilized on a high plateau of earnings—stabilized but not moving forward—there has been little incentive to continue endlessly the process of bidding up prices even of the best stocks. Periodically, groups of appraisers of security values rediscover that shares are quoted at unprecedented peaks and assume that every favorable aspect of the situation has been fully discounted. That attitude brings resistance to further advances. The stock market rarely stands still. If traders cannot effect a further rise, they seek to force a decline in the market.

tions.

They are recognizing to an increasing extent that stock market speculation, though closely related to underlying economic conditions, is a business in itself, subject to its own laws. Accordingly, wise managers of business enterprises no longer get delirium tremens whenever the stock market becomes subject to a periodical intermediate reaction, which all except

those who carry stocks through the decline call healthy.

SPECIFICALLY, nothing in the field of industry and commerce in 1926 tended to justify the precipitate and panicky decline in speculative security prices in March, 1926. The speculative collapse proved to be only an internal stock market phenomenon, a reaction from the previous excessive bull speculation. At the time many commentators believed that the wide-open break in prices foreshadowed a major setback in American business. As a matter of fact, 1926 proved a year of peak earnings for great corporate enterprises. The spring (1926) setback in business was mild and ephemeral.

In recent weeks, downward movements in security prices have been unrelated to immediate business prospects. Setbacks have been the result of price shock rather than an expression of fears that business would be less prosperous. The current symbols, such as car loadings, bank debits, and current trade reports, point to a quickening of the business pace after the summer recession.

As long as commercial conditions remain relatively stabilized, the main concern of speculation will be the probable long-term rates on capital and the proper ratio between earnings and market price. Until outside economic conditions become unfavorable, reactions, when and if they occur, will be designed to offset rashness and over-enthusiasm within the market, but will give no important clue to prospects in the world outside. Some industries, such as oil and the metal trades, of course have not participated in this golden age of business, and their securities are in an entirely different status from those of favored industries.

SOBER-MINDED individuals, who seek facts irrespective of current hysteria, frequently make themselves unpopular. Frank L. Dame, president of the North American Company and one of the outstanding leaders of the public utility industry, used to act as adviser to the General Electric interests earlier in the century. The chief executives of the company would get only the enthusiastic prospectuses of promoters of public utility companies and the sober-minded fact reports of Mr. Dame. Frequently he would estimate that construction activities would

Thirteen Times the Man Power of Industry Hidden away in Electric Motors

How well you employ these unseen workers depends on your choice of motor control



Many machinery manufacturers today capitalize the important party played by Motor Control in the performance of their products in service. Their engineering departments, through extensive studies of motorized machine operations make use of Cutler-Hammer Motor Control in their designs to take full advantage of the production economies possible.

Many of the seconomies

the production economies possible.

Many of these companies, as well, call the Cutler-Hammer engineers into consultation and through their broad experience in applying Motor Control to countless production problems, time and labor saving equipment is developed which rises above comparison with machinery less carefully conceived.

In the purchase of new machinery of any type, industrial plants, more and more, are coming to to recognize the Cutler-Hammer trade-mark on the Motor Control supplied as sound indication of careful design and trustworthy quality throughout.

Government figures show that electric motors today put into America's industries thirteen times the man power of the actual men employed. Thus, the care executives are demanding in the choice of Motor Control is most logical. Such an investment in productive effort must be properly directed or costly inefficiency is sure to follow.

This direction of the unseen army of industry is exactly the function of Motor Control. When you install motors you merely put these unseen workers at their posts of duty. How completely you utilize their labor depends on how well the Motor

Control chosen directs their efforts to do the work in hand.

Realizing the true importance of Motor Control is the first step toward the economies of production competitive conditions now demand. No plant can long afford to neglect such worthwhile savings. Ask now for a check of your motor drives to make sure that the control has been correctly chosen. In the purchase of new machinery, in which motor and control are furnished by the machine builder, demand C-H Control. The C-H trade-mark on ALL your Motor Control is your best assurance of efficient, dependable production.

Cutler-Hammer engineers are ready to co-operate with your plant men or consulting engineers in making a survey of your plant to see that Motor Control is correctly chosen for every drive. More than 30 years' experience supports their recommendations and this service entails no obligation or expense on your part



Full of facts. Stories of savings no executive will want to disregard. Sent without charge or obliga-tion. Your copy is waiting now.

tion. Your copy is waiting now.

Report 1827—In a gas plant, motors driving the vibrating screen sgave considerable trouble—with costly delays in operation—due to burning out of the windings. The Cutler-Hammer engineer, upon investigation, found each motor was connected to the line with an ordinary knife switch and that a "burnout" occurred when a fuse blew and the motor ran on one phase instead of three. C-H Automatic Acrossthe-Line Starters with thermal overload relays were installed in conjunction with C-H Phase Failure Relays. This entirely eliminated the trouble, and the savings in production delays and rewinding charges paid for the installation in less than a month.





CUTLER-HAMMER

Industrial Efficiency Depends on Electrical Control



-for suitable bonds



Some bond investors demand the utmost in security—others look more to income. Some need ready marketability—others place tax-exemption first among their requirements. The National City Company always offers a wide choice of bonds of the various types, some meeting the needs of one investor, some the needs of another. Competent bond men at any National City office will gladly help you make a suitable selection. Ask for current list of recommended issues.

The National City Company

National City Bank Building, New York

OFFICES IN 50 AMERICAN CITIES - INTERCONNECTED BY 11,000 MILES OF PRIVATE WIRES - INTERNATIONAL BRANCHES AND CONNECTIONS

Effective Advertising

"IN comparison with the rest of our advertising schedule for the industrial market, Nation's Business surpasses all other publications for effectiveness," writes J. G. Mayer, Advertising Manager of the Anchor Post Fence Company, New York. "The editorial content and general layout of your magazine is in our opinion the magnetic power which attracts the busy executive to delve within the covers of Nation's Business."

cost twice as much as engineers who were seeking the contract indicated, and he would forecast that net earnings would be half as large as predicted. Such deflation of the fairy tales of promoters was not calculated to make Mr. Dame popular with operators on the other side of the fence. In the case of the Appalachian Power Company, Mr. Dame was called upon years ago to make a survey for the late C. A. Coffin, of General Electric, and his associates. In his report, Mr. Dame said that, if the upward trend in the Pocahontas coal industry continued at the existing rate, the earnings of the public utility would be so and so. However, there was a slump in the coal industry, and earnings of the utility were accordingly below expectations. One of Mr. Coffin's associates later complained that he had assumed that Mr. Dame's forecast was rock bottom, below which earnings could in no circumstances fall. As a result, Mr. Dame checked over all his forecasts and estimates over a period of years and compared them with what results had actually been attained. He found that he had been an optimist by one-half of one per cent.

LIKE industries, banks have been finding a way out of the new competition in

Accordingly, there was in the last thirty-seven years a net increase of only one in the number of banks operating in New York City, although the population has more than doubled. Expanding facilities, however, have been provided by 75 branches of the ten leading banks, which at the end of last year possessed resources equal to 60 per cent of the total belonging to the 143 banks and trust companies operating in the metropolis, whereas in 1889 the ten leaders had only 33.3 per cent of the aggregate resources of all banks.

Since the beginning of the present cen-

Since the beginning of the present century, the National City Bank has retained leadership among American banking institutions in every year except 1920, when the Guaranty Trust Company temporarily held first place.

As a result of recent capital changes, the National City Bank has the distinction of being the first bank in the world, from the standpoint of magnitude of capital and surplus.

However, the five London banks which dominate the banking business of Great Britain outrank the National City in deposits. Average deposits for July, 1927, for the National City Bank and the London institutions follow:

National City Bank	\$1,103,000,000
Midland Bank	1,774,503,000
Lloyd's Bank	1,674,490,000
Barclay's Bank	1,491,456,000
Westminster Bank	1,300,655,000
National Provincial Bank	

OF THE fifty largest banks in the United States, twenty-one are situated in New York City.

The fact that the majority of the leaders is scattered throughout the country results from the continuance of the American system of unit banking in contradistinction to the nationwide chain banking such as prevails in Great Britain and in

Canada. As a result of post-war mergers, five banking chains control the situation in Great Britain, and all of them, of course, make their headquarters in London.

If the banks of the country are arranged in order of their deposits, at the close of business on June 30, last, twenty-one of the first fifty will be found to be New York institutions. After the National City Bank, the next two largest institutions—the Chase National Bank and the American Exchange Irving Trust Company—are also located in New York. Fourth place, however, goes to the Bank of Italy of San Francisco, which operates a statewide chain of banks in California.

Seven of the first ten American banks and trust companies are located in New York; New York also has six of the second ten, three of the third ten, four of the fourth ten, and one of the fifth ten.

Chicago and Boston are next as banking centers, with four of the first fifty insti-

tutions each.

Four cities are tied for next place. San Francisco, Los Angeles, Detroit and Cleve-land each has three of the first fifty banks.

Three cities, Buffalo, Pittsburgh, and Philadelphia, are tied for next place with two leaders each.

Moreover, three cities, Newark, Providence, and St. Louis, with one leader each,

are tied for next place.

The largest bank in New York—the National City Bank-reported deposits of \$1,199,973,000.

The largest in San Francisco—the Bank of Italy—revealed deposits of \$603,844,000.

The Continental & Commercial National Bank, in Chicago, reported deposits of \$460,512,000.

The First National Bank is the largest in Boston, with deposits of \$328,438,000.

The Security Trust & Savings Bank of Los Angeles is the largest there, with deposits of \$234,052,000.

In Detroit, the Peoples State Bank is the largest, with deposits of \$138,102,000.

In Cleveland, the largest is the Union Trust Company, with deposits of \$291,731,-000

In Buffalo, the Marine Trust Company is the leader, with deposits of \$206,830,000.

The Mellon National Bank, with deposits of \$154,886,000, leads the field in Pitts-

In Philadelphia, the Philadelphia Girard National Bank takes first place, with deposits of \$190,572,000.

The Fidelity Union Trust Company, with deposits of \$130,050,000, is the leader in Newark.

THE SUCCESS magazines perpetuate the tradition that the world is peopled by heroes and villains. In real life, however, even the strongest, ablest men frequently have soft spots which only serve to emphasize that they are human. To the public, little has been divulged of Elbert H. Gary, the man, who to his friends was first of all a human being. Arundel Cotter, of the Wall Street Journal, occupied an especially close relationship with Judge Gary. He was a close friend and confidant for many years.

In presenting a portrait of the late head of the Steel Corporation, Mr. Cotter, in

Are You Overlooking Opportunities in the Newer but Solidly Founded Fields of Bond Investment?

Just as a man changes methods or policies in his business to meet new conditions, so should his investment viewpoint be flexible. Otherwise his money cannot benefit from employment in thriving situations nor avoid penalty where there is stagnation or decline.

HE steady progress and change that are going on in the business and industrial world must be considered by the bond investor. Observation will make clear that new fields for investment thus develop, some attaining positions of outstanding strength and stability. The automobile is a notable example in the industrial world; real estate bonds, farm loan bonds, foreign bonds, have come into wide popular favor only since

Consider the motion picture industry. It is only about thirty years old, but it has grown to such giant proportions that gross receipts now approximate a billion a year. And what was at first a mere novelty has become almost a necessity in the lives of millions of patrons. The demand is active in all seasons and under widely varying conditions. It meets universally the need for recreation at a price within the reach of all.

Another instance is the publishing business. Until recently great newspapers and magazines seldom went to the public for capital. But growth in this field has been so rapid that the publishing business is now a source of a considerable volume of attractive securities. The earning power of strongly entrenched publications with great circulations and advertising revenues provides a sound basis for long-term credit.

Investors may add safety and often increase their yield by including in their holdings, bonds-whether debenture or first mortgage - of large, established concerns in the newer industries or the newer forms of financing of old industries.

Halsey, Stuart & Co. is on the alert for such investment opportunities, applying the same high standards of conservatism in their appraisal as in older fields of bond financing. It has underwritten, alone or with associates, bond issues of companies subsidiary to prominent interests in the motion picture industry-Fox Film Corporation, Fox Theatres Corporation, and Loew's Incorporated. In the publishing field, issues of such companies as The Chicago Daily News, Inc.; Evening American Publishing Company (Chicago); Minnesota Tribune Company (Minneapolis Tribune); Memphis Commercial Appeal, Inc.; Hearst Publications, Inc.; Hearst Magazines, Inc.; and The Butterick Publishing Company.

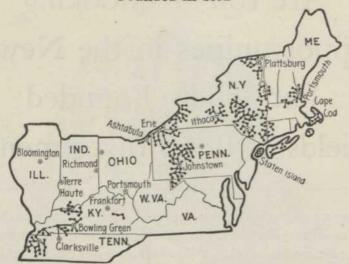


HALSEY, STUART & CO.

PHILADELPHIA III South 15th St. DETROIT 601 Griewold St. CLEVELAND 925 Euclid Ave. ST. LOUIS 319 North 4th St. BOSTON 85 Devensbire St. MILWAUKEE 425 East Water St. MINNEAPOLIS 608 Second Ave., S.

Associated System

Founded in 1852



Public Service in 15 States

From a small beginning in 1852, the Associated Gas & Electric System has grown until now it serves over 580,000 customers. Of these, 357,630 are electric customers. 77% of the net earnings of the Associated System are from the sale of electric current. The public service activities of the Associated System extend throughout 1,000 com-

munities having 2,700,000 population.



Associated Gas and Electric Company

Incorporated in 1906

Write for our booklet "N"

61 Broadway

New York

Investing by Mail

JO MAN or woman in the United States today, who lives within daily reach of the postman, is out of reach of our Investment or Stock Departments.

For more than thirty-nine years these Departments have served satisfactorily the requirements of thousands of American investors, large and small, many of whom live far from any of our offices.

Communications addressed to our Correspondence Department at any of our offices will receive immediate attention.

HORNBLOWER & WEEKS

BOSTON NEW YORK CHICAGO CLEVELAND PROVIDENCE DETROIT PORTLAND, ME. PITTSBURGH Members of the New York, Boston, Chicago, Cleveland, and Detroit Stock Exchanges

Barron's remarked: "Let us for a time look on the other side of the former head of the United States Steel Corporationthe foibles and the weaknesses that humanized him.

The most noticeable of these was a decided streak of personal vanity. This betrayed itself in many ways, not the least being a fondness for fine apparel, a care and attention to the niceties of dress. As a small boy, I doubt very much whether young Elbert Gary objected, as most healthy youngsters do, to having his ears and neck washed. Certainly, at an early age he betrayed a fondness for cleanliness and neatness exceedingly unusual in the young animal of masculine persuasion. And this stuck to him through life. He not only took an intense pride in being correctly valeted but he was interested in the dress of others.

". . . He was somewhat tender on the subject of his stature. To this day I don't know how much he measured in his stocking feet, but he gave the impression to me at least of being 'on the short side.' But he objected seriously to being thus described, insisting that he was of medium height, 5 feet 8 inches. I suspect the measurement was taken in rather highheeled shoes.

"Another matter on which he was touchy was that of his age. . . .

THE world of finance is still in a period of mass production of investment trusts. The new vogue represents an attempt to get the investor to transfer his allegiance from the investment banker to outside appraisers of security values. Unless the investment trust managers know at least as much about work of stocks and bonds as investment bankers, the switch may not prove altogether fortunate.

STUART CHASE, accountant and economist, and F. J. Schlink, engineer have through their new book, "Your Money's Worth" (Macmillan), leaped into the elite class of better sellers, which until recently had been occupied mainly by purveyors of fiction, tales of philosophy and cross-word puzzles. The thesis of the authors is that there is a large element of bunk in advertising claims, and that ultimate consumers -poor souls-are wandering helplessly in Wonderland, unable to decide whom to believe. The authors suggest setting up scientific agencies such as the Bureau of Standards in Washington to give factual information to discerning buyers. They would deflate business of its present emo-

Paul M. Mazur, of Lehman Brothers, one of the outstanding younger bankers of Wall Street and an authority on retail distribution, by way of comment, told me that the public already has such fact-finding agencies in the department stores. "The interest of the great retail stores, said Mr. Mazur, "is always on the side of the customers. If instead of demanding branded merchandise, the customers would rely on the judgment of the stores, they would in a practical way get what Messrs. Chase and Schlink are advocating. The success of stores would depend on justifying this faith of their customers in their discernment.

"Likewise, in buying securities, the public can expect this judgment from their investment bankers."

I ALSO discussed the investment status of department store securities with Mr. Mazur. "Department store profits on net sales," he said, "are rather less than those of most industries. They are certainly much less than those of the automotive industry."

However, retail stores turn their capital over more rapidly than most manufacturing industries, and the successful stores, despite an average profit of only 5 per cent on sales, show very handsome returns on investment capital.

In further commenting on department store securities, Mr. Mazur added: "With reference to the low point, people must consume even during adverse times when

they are not producing.

"Moreover, department stores constitute virtually a natural monopoly as a result of the shopping habits of the public. Department stores have either built up their name and good will rapidly at great expense or more gradually over a long term of years.

"If, on account of the new creditor position of America, it becomes necessary greatly to increase merchandise imports, the department stores will be less adversely affected than our manufacturing industries. The department stores will have the advantage of being able to acquire cheap foreign

goods and sell them at a profit.

"Moreover, the competition which a department store faces is localized, whereas an industrial plant potentially confronts world-wide competition. A new department store in Detroit, for example, will not affect the business of stores in New York, whereas if a new industrial process is developed in Afghanistan, it might, except for the tariff, throw out a competing factory in New York

factory in New York.

"On the high side, there are expectations of growth in the size of the community, expansion in purchasing power, and increased buying as a result of the new factor of obsolescence. Moreover, there are opportunities for substantial savings as a result of improved technique in retailing. For example, even the best managed stores make average mark downs of 7 per cent. If this could be decreased slightly, it would greatly expand net earnings.

"Quasi public financing, under which the managers retain control, gives additional incentives to management to succeed. With their stock quoted in the open market, managers are in effect applauded for good achievement and deprecated for shortcomings. The effect of this type of check is stimulating."

THIS is a period of low wages for capital. Long-term interest rates continue to decline, reducing the earning power of investors. Moreover, in active barter, men of business complain of a profitless prosperity. Even Alfred P. Sloan, Jr., president of the forward-moving General Motors Corporation, observes that in only one

Equitable Foreign Banking Service

The Equitable Trust Company of New York occupies an unusual position in the field of foreign banking. With large branches in Paris and London and over 11,000 banking correspondents throughout the world it offers facilities which are a distinct asset to firms doing a foreign business.

An Account in London or Paris

Merchants can save interest, provide funds for the convenient payment of their European bills and establish a valuable European credit reference by opening an account in our London or Paris Offices.

Foreign Credit Information

We furnish our customers with up-to-date credit information regarding individuals, firms, or corporations throughout the world.

Cables

Cables are sent and received by us during business hours at the rate of one a minute. We have arranged many special codes for our customers, saving them time and money and assuring absolute privacy in transactions.

Loans

Our service includes the handling of loans arising out of the importation or exportation of commodities by our customers.

Import Letters of Credit

We issue Import Letters of Credit on all parts of the world either in dollars or in the currency prevailing in the port of shipment. Highly trained men are employed to aid importers and facilitate the handling of their merchandise.

Foreign Exchange Trading

The Equitable is a leading bank in foreign exchange transactions, buying and selling cable transfers for the purchase and sale of foreign exchange and buying sight and time documentary bills in foreign currencies. Expert advice is given customers in covering their requirements.

Exchange

Checks and drafts may be obtained from us, issued on all parts of the world, payable in dollars or in foreign currencies. Mail transfers of foreign payments are also arranged.

E. T. C. Travelers' Letters of Credit

E. T. C. Credits are cashable all over the world. They are safe, convenient and economical. Inquire at any Equitable Office.



The man who bought silk in Shanghai

became a confirmed believer in our claims to superior foreign banking service when we showed him how he could save from 2% to 10% in interest in the financing of his purchases. Not only do we facilitate our customers' foreign transactions, but we are frequently able to save them large sums.

Our subsidiary, the Equitable Eastern Banking Corporation, with offices in Shanghai, Hongkong and New York, offers the services of a bank devoted exclusively to Asiatic transactions.

Read the column at the left . . then send for our booklet, "A Guide to Equitable Foreign Banking Service."

THE EQUITABLE TRUST COMPANY OF NEW YORK

37 WALL STREET

MADISON AVE. at 45th ST. MADISON AVE. at 28th ST. 247 BROADWAY

DISTRICT REPRESENTATIVES

PHILADELPHIA: Packard Building

BALTIMORE; Keyser Building, Calvert and Redwood Sts.

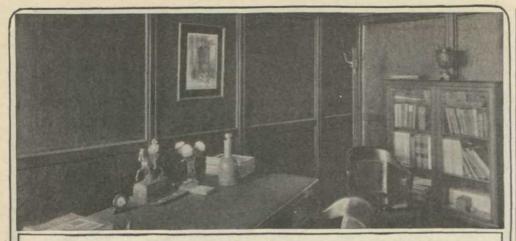
ATLANTA: Healey Building CHICAGO: 105 South La Salle St.

SAN FRANCISCO: Financial Center Building

LONDON · PARIS · MEXICO CITY

Total resources more than \$500,000,000

@ E.T.C. of N. Y., 1927



Dignified Offices

Circle A Partitions reflect, from their smooth, polished surfaces, an unmistakable air of dignity and refinement. Choose them in any of the finer or less expensive woods: birch, quartered oak, mahogany, walnut or gum. Finished in the simple, classic lines of the Cabinet design—or the less expensive Commercial—Circle A Partitions form luxurious, fine appearing CIRCLE A PRODUCTS CORPORATION.

offices. But not for sheer beauty alone are Circle A Partitions chosen. Their movability makes them popular—for they can be rearranged quickly to fit future office needs without expensive alterations.

You will be interested in our booklet, "Partitions." It tells more about these beautiful office walls. Send for a copy today.

CIRCLE A PRODUCTS CORPORATION - 658 South 25th Street, Newcastle, Indiana



After TWENTY YEARS a Client Writes

About us to the Vice-President of a manufacturing company:—

"The.... System of Gas & Electric Companies have employed the services of the Fuel Engineering Company for the past twenty years, and during that period they have not only advised us in connection with the selection and purchase of coal, but rendered a service in the matter of plant operation, that has been of great value to us.

It represents one of the few connections we have had which we can recommend without any reservations whatsoever."

"Even Better Steam Generation" deals with the subject, entirely from the viewpoint of general management. A copy will be sent to any manufacturing executive upon request.

FUEL ENGINEERING COMPANY

Fuel and Power Engineers 116 EAST 18th STREET, NEW YORK

FST- 7 1907



AGREAT MANY manufacturers are evincing an interest in this thriving industrial center.

If you also are considering a western factory-branch or ware-house, you should have the facts about Oakland.

You are invited to request such information from us. We can give you accurate, confidential guidance.

The Oakland Bank
TWELFTH AND BROADWAY
OAKLAND CALIFORNIA

previous year has the corporation, which in 1927 will show unprecedentedly large earnings on its capital, received smaller profits per car. The public accordingly is getting more out of industry and commerce at a lower return than in the past.

THE EXTREMES to which Henry Ford, on the one hand, and executives of the General Motors Corporation, on the other, have gone, on the eve of the heightened competition resulting from the production of the new Ford model, to express mutual admiration and high regard reminds one of the old-time friendship of Alphonse and Gaston. General Motors seems disposed to let Mr. Ford retain the distinction of making the cheapest car, but unquestionably Chevrolet dealers will seek to induce ultimate consumers to spend a little more and buy the Chevrolet instead of the Ford. General Motors will concede the marginal buyers to Mr. Ford but will seek to win the patronage of the more affluent potential Ford buyers, who, if they chose, could pay a little more. Fine words will in no manner blunt the edge of the sword of competition which each side will wield as intensely as it is capable.

The first effect of the actual sale of the new Ford will be to stabilize the automotive industry, which would prefer a known competitive fact to the continuance of vague imaginings. The new Ford will pay hostage to the current demand for frills

and beauty in motor cars.

BY ADROITLY appointing a banker from the west to fill D. R. Crissinger's post as governor of the Federal Reserve Board, President Coolidge has temporarily stilled the protest over the action of the board in reducing the rediscount rate of the Chicago regional bank over the protest of its own directors. However, Senator Carter Glass, of Virginia, will bring the question up when Congress meets in December.

If the Federal Reserve Board can act on the discount rate irrespective of the opinions of the responsible executives of the local banks, the board will have become virtually a central bank, with twelve branches. The farming sections of the country have long feared the concentrated power of a central bank, and accordingly the establishment of such an institution has been considered politically inexpedient. The Federal Reserve Act was a compromise, which sought to attain the benefits of central banking without the establishment of a central bank. As early as 1919 an assistant attorney general ruled that the board had the power to effect rate changes irrespective of the views of local boards, but until a few weeks ago the board never exercised this power. Among bankers in the east who think the board should have such authority, the opinion is widely held that it should be exercised only in time of national emergency.

Another issue is in the background. The twelve regional private institutions, whose stockholders are the member banks of the community. On the other hand, the Federal Reserve Board consists of political appointees. An undue extension of the power of the central board would inject

more government into business.

Assembling Our Autos Abroad

ONLY three years ago there were but 10 foreign branch plants of American automobile companies where full assembly operations were carried on. There are now 25 of these plants. These figures do not take into consideration the branch plants in Canada. During the first six months of 1927 according to Commerce Reports, 307,-000 American cars were sold to foreign consumers and of this number about 39 per cent or 120,000 were assembled abroad. During the first half of 1925, 257,000 cars were sold and in the similar period of 1926 the number increased to 263,000. The percentages of cars assembled abroad grew from 35 per cent to 36 per cent and in 1927 to 39 per cent.

The benefits of assembling Americantype cars in foreign countries are savings in freight on shipment of unassembled parts, savings in duty payments since many countries charge less on parts than on retup automobiles, distribution is facilitated by local assembly, local preferences in construction and equipment can be catered to, the savings accruing from the lower cost of labor and material. Branch plants are now located in England, Denmark, Belgium, Spain, France, the Irish Free State, Argentina, Brazil, Germany, Mexico, Japan, Australia, the Union of South Africa, New Zealand, Uruguay, and the Dutch East

The use of the "free port" facilities of-fered in many countries has facilitated foreign assembly of cars. A plant in such a port may serve several countries. In many cases because of the savings realized by the use of such facilities and other factors, the cars are offered at lower prices than could be quoted on cars fully assembled in the United States.

The open passenger car is the leader in sales. Australia led in the number of foreign assembled cars with a total for 1927 of 22,025, an increase over 1926 of 12,040. Denmark is second with a total of 19,232 sales and Argentina third with 18,855 sales.

A New Grocery Chain

A NEW combination of old ideas is mentioned by the San Francisco Grocer, in the adaptation of the five and ten cent chain idea to the grocery business. The first store was opened in March, 1926, in Boston in an apartment district. The second store opened in January, 1927, in another such district.

No goods are sold for more than ten cents. Where it is impossible to buy from the manufacturer in packages selling for five or ten cents, the company buys in bulk and packages the product itself, using the company's own brand. The company sells 750 items which are placed on shelves similarly numbered in all stores and in the warehouse. In restocking only the number need be given.

According to the manager of the company, "We have found no article that could not be obtained in a form suitable for retailing within our price range."

The

BANK OF CALIFORNIA, N. A.

A National Bank

SAN FRANCISCO

FOUNDED 1864



CAPITAL \$8,500,000 SURPLUS AND UNDIVIDED PROFITS EXCEED \$8,500,000

With a background of over sixty years' participation in the development of the West, this Bank, at each of its offices, provides complete commercial banking facilities for individuals, firms, corporations, banks and bankers interested in local or nation-wide enterprises.

FOREIGN TRADE

offices, to handle all bankexport and import business.

TRUST SERVICE

Long-standing, intimate re- This Bank, at each of its lations with leading com- offices, acts for individuals, mercial banks in principal firms and corporations in foreign trade centers enable every fiduciary capacity this Bank, at each of its permitted to banks or trust companies under Federal ing requirements arising in laws, and the laws of the respective States.

BRANCHES

Owned and operated by this Bank since 1905 PORTLAND , TACOMA , SEATTLE

Spray-Paint Your Business

Property at a fraction of the cost of hand-painting



Savings More than Pay for the BINKS Portable Spray-Painting Outfit

You can spray-paint any large building regardless of surface texture, inside or outside, and more than save the cost of the equipment on the first big painting.

The Binks machine method of painting is 4 to 5 times faster than hand work. Operation is simple; requires less man power, and does better work.

In Factories, Business Buildings, Hospitals, Schools, Hotels—in fact wherever efficient light, sanitation and the maintenance of property are essential; the ownership of a Binks Portable Spray-Painting Outfit is a dividend-paying investment.

Interesting details will be mailed to you upon request. Address:

BINKS SPRAY EQUIPMENT CO. Dept. L, 3128 Carroll Ave., Chicago, Ill.

Offices in Principal Cities

Spray-Painting Equipment for Every Industrial Requirement

When the Brick Comes Back

By DONALD McGregor

BRICK—no one knows who made the first one, but for more than 6,000 years mankind has made brick buildings. But it took the World War to give brick its hardest blow. A thousand of its plants had to shut down, although those of its much younger rivals were running full blast

Brick had little to do in the hurry of war-time construction. Cement, lumber and steel went into camps, cantonments, shippards and embarkation centers. All but emergency building was under the ban. Occasionally a manufacturer of war essentials erected a brick addition to his factory, but these jobs were crumbs compared with the heaping platters dished out to rivals of brick.

The outlook for brick seemed only slightly more rosy with the arrival of peace. The swift pace of war had lost little momentum. To overcome a national housing shortage by laying a brick at a time appeared a bit slow.

Brick had enjoyed a long reign in the world of permanent building. Its rival was stone, which, to be sure, had as much if not more to its credit; but cost and difficulty in handling had held stone back from all except monumental structures.

In all its years brick had changed but slightly. Its form had changed gradually since the natives of the Nile saw the sun bake clay into irregular blocks they could pile up for barricades and shelter. The straw-filled units that entered the great walls of China and the wonders of Babylonia had given way to smaller sizes a man could handle with ease. The chemical reactions produced by the sun's heat had been improved by baking in kilns. Otherwise the product had remained much the same.

Europe, largely brick-built, had seen its preference for brick reflected in the early days of America. Though lumber was plentiful and cheap, the pretentious houses were brick. Almost every town that dates back a hundred years has its brick landmarks put up by pioneer men of affairs. Most public buildings were brick, among them Independence Hall, where the patriots wrote the Constitution.

A brick was a more specific term then. Face and paving brick had yet to be developed as they are today to meet fashions in architecture and the call for hard, smooth roads.

Methods of brick construction were uniform. Walls were solid and seldom more than four stories high. Brick pillars carried especially heavy loads; floors rested on timber tied in the walls. Then came a change. Iron and steel were used for pillars and to carry the floors. Against the first inroad on brick, brick did not complain. The innovation meant taller buildings, taller buildings greater wall surface, greater wall surface more brick.

Then Portland cement invaded the field. Concrete pavements appeared, concrete blocks to build walls, concrete pillars and beams poured into wood moulds on the job, concrete stucco to cover lath or hollow tile.

Some brickmakers, observing the onslaught, were like the saloonkeepers who swore prior to 1920 that the United States never would embrace prohibition. They regarded concrete a fad. But factories sprang up everywhere to make concrete blocks; concrete houses appeared by the score; concrete roads and walks unfolded themselves by the mile. While 10,000,000 barrels of Portland cement had been sold in a year, the demand for brick dropped!

Lumber, always a rival of brick, opened new fields. The mail-order house widened cost difference between brick and frame. Brick veneer, with a single course enclosing a lumber shell, helped lumber as well as satisfied those who demanded a fireresistant exterior, permanent color and economical upkeep.

Paving brick encountered asphalt as well as cement. The boom in road building that came with the automobile had promised much to its manufacturers, but cost was against them. Freight rates and wages were high; asphalt and Portland cement could be shipped compactly and poured from machines. A public that sought highway construction demanded low taxes as well.

Short of Bricklayers

THE country was short of bricklayers. Thousands, forced to other work during the war, had failed to return to their mortar boxes. Few young men were learning the trade. The average age of the bricklayer was forty-three! "If brick are sold," their makers reasoned, "somebody must lay them up."

Now the brick industry, in some ways, is peculiar. Great in size and spread, it has many small but few large companies, due to the abundance of clay in the United States. Almost any town can boast of some kind of brick plant. A business largely local, many of the men in it were too busy with their own affairs to consider the national aspects. Some started making brick, not by reason of special fitness, but because they happened to find clay on their property. A farmer and his sons with a plant near the creek, perhaps, supplied the needs of the nearby town. And they did the work themselves.

The more alert members of the industry belonged to the National Brick Manufacturers' Association of the United States of America. Formed more than forty years ago by the late T. A. Randall, the organization has concentrated on production problems, such as the determination of better methods of drying and burning and the development and application of laborsaving machinery. A force in elevating standards and lowering manufacturing costs, it did not attempt sales promotion.

The brick industry, broadly, divides into three groups making face brick, common brick and paving brick. Each, with special



HIS COMPANY occupies a hazardous position, bankruptcy faces them, all because their steel files and insulated containers failed in the fire. Of course, Taylor wasn't entirely to blame for the fire. He had taken every precaution to guard against it, however, the records were lost and Taylor is responsible.

The loss of the perpetual inventory, sales slips, invoices, and accounts payable delayed payment of insurance and means a tremendous sacrifice. This condition seriously embarrasses his company. Together with this was the loss of the cost and piece work cards, time studies, etc. These can be replaced after months, perhaps years of work and enormous expense.

What would be the fate of your records if your company burned tonight? Are they protected in safes that have a reputation for coming thru actual

fires, or would your safes fail, and make you a like victim of circumstance?

Sixty-one thousand four hundred Meilink Built Safes are now protecting the records of a big per centage of America's larger businesses. Meilink Safes are tested by the Underwriters' Laboratories, and also rated Type 1 construction by the United States Bureau of Standards. Your confidence placed in Meilink Safes is verified by these two great impartial bodies and by the unequalled record of "Better Protection" Meilinks have made in hundreds of actual fires and burglaries, over the last quarter century.

We will gladly tell you more about this record of "Better Protection." Check the coupon and attach to your letterhead. Also ask about Hercules Safes. They are guaranteed protection from fire for one hour when tested by the Underwriters' Laboratories. Their low price and good fire and burglarly protection make them ideal for private office and home use.



Constructive Auditing

An independent audit is to be regarded always as the means to valuable advice from the auditor or auditing firm.

Too often, auditing service ends with the report of the financial condition of (name) as of (date).

Auditors should be equipped—and should be employed-to offer recommendations in connection with method, policies, financing, etc.; to furnish comparative statistics intelligently prepared; to point out how mistakes and waste may be eliminated, and pitfalls avoided.

Of course, every audit should be a Detailed Audit. But whether it be Detailed, Semi-Detailed or Balance Sheet, it can, and should be made to, serve as the basis, not only of the financial report, but also for constructive help.

With the business man's appreciative understanding of this help, and the cooperation of progressive Public Accountants, Auditing becomes Constructive and offers its greatest value.

ERNST & ERNST

ACCOUNTANTS AND AUDITORS SYSTEM SERVICE

NEW YORK PHILADELPHIA BOSTON PROVIDENCE BALTIMORE RICHMOND WINSTON - SALEM WASHINGTON EUFFALO ROCHESTER

PITTSBURGH WHEELING ERIE ATLANTA MIAMI TAMPA CINCINNATI DAYTON LOUISVILLE HUNTINGTON

CLEVELAND AKRON CANTON COLUMBUS YOUNGSTOWN TOLEDO ST. LOUIS MEMPHIS KANSAS CITY OMAHA

CHICAGO MILWAUKEE MINNEAPOLIS ST. PAUL INDIANAPOLIS FORT WAYNE DAVENPORT DETROIT GRAND RAPIDS KALAMAZOO

HOUSTON SAN ANTONIO WACO DENVER SAN FRANCISCO LOS ANGELES

NEW ORLEANS

Is Your Son in College this Fall?

(The young man in school today will be the executive in business tomorrow. Eusiness is becoming a profession for the college graduate.

(If your son is in college this fall, why not start him off right by giving him sound fundamental ideas about business—by entering a NATION'S BUSINESS subscription for him.

(I'I send Nation's Business to my son who is a junior at Yale," writes a subscriber in Duluth, Minn., "for I think he can get as much out of it as from most any course of study he takes."

Nation's Business is \$7.50 for three years, or \$3 for one year. Just tell your secretary to order the subscription. We'll send you the bill later.

NATION'S BUSINESS, Washington, D. C.

purpose, encountered special sales prob-lems. With the national manufacturers' association embracing them all, they decided to create three new organizations devoted to sales. Instead of letting competitors "say it with flowers," they would "say it with brick." Together they would fight the rivals of brick; on issues concerning themselves they would go it alone.

These three fighting units are the American Face Brick Association, the National Paving Brick Manufacturers' Association and the Common Brick Manufacturers' Association of America. They are countrywide and their membership comprises the bulk of production in the different lines. The face and paving brick associations were first in the field, having started in 1912, but neither got fully into their stride until after the war. The common brick associa-

tion came later, in 1919.

Each maintains a national headquarters and an expert promotion staff. The chief offices of the face brick association are in Chicago in charge of R. D. T. Hollowell, the secretary-treasurer; those of the common brick association in Cleveland in charge of Ralph P. Stoddard, the secretary-manager, and those of the paving brick association also in Chicago in charge of John W. Breyfogle, general manager. The campaigns are financed by fees collected for every thousand brick sold.

Promotion Is Stressed

BROADLY, the work of the three associations is much the same. They advertise regularly in magazines. In the national magazines face and common brick attempt to win the prospective house builder; paving brick, the taxpayer, who, after all, foots the bill for road construction. Technical arguments for brick are reserved for the trade magazines.

Obviously, there is competition between face brick and common brick in house construction; yet it is slight. Face brick argues beauty at small additional cost; common brick denies it is an ugly duckling, particularly if builders attempt interesting surface effects. This is the only parting of the ways by the two associations.

They work in harmony for more bricklayers. They have been a force in establishing bricklaying classes in manual training schools as well as in providing data for architectural students in colleges; they have induced mason contractors to use apprentices. Since 1921 they have watched the number of journeymen bricklayers inerease from 83,634 to 111,000 in 1925; the number of apprentices from 1,437 in 1921 to 13,286 in 1926.

Right now it appears that the country sections are worse off for this class of labor than the cities. Surprisingly, perhaps, but typical, one rural district of 300 square miles in Ohio, a center of the clay industry, has only five bricklayers. Both the face and common brick associations are working to remedy this so they may bid in the hitherto neglected field of farm building.

Common brick has had an even tougher fight than face brick since it has been the lot of common brick to combat the very cheapest forms of other building materials, those in which the essential is price.

To do this the common brick associa-

tion produced two radical types of wall construction. Intended for price argument with frame and stucco, they are called the Ideal wall and the Economy wall. Both permit a saving of brick and, in the field for which they are offered, bear engineering approval. Samples of both have been found which are in good condition after a hundred years.

To obtain engineering data on the strength of walls, so that city building codes unfair to mason construction may be revised intelligently, the Common Brick Association has a representative at the Bureau of Standards in Washington testing brick and mortar under all conceivable conditions. Similarly, the American Face Brick Association has a representative there to gather scientific information.

The makers of paving brick, trying to overcome their handicap, attempted to learn the minimum requirements for road construction. They conceived the idea that the customary four-inch paver, expensive to make and transport, might be reduced in size

The Paving Brick Association arranged, consequently, with the Federal Bureau of Public Roads for a series of tests at Arlington, Va. Roads built of different types were subjected to heavy traffic under severe conditions. The government engineers found that paving brick, if laid on a proper base, holds up just as well if only two and a half inches thick instead of four.

Paving brick has been inspired with new hope. Able to reduce price materially, the manufacturers' association is fighting to win back a position in road construction that seemed hopelessly lost.

These achievements and many more, less spectacular, maybe, but just as important, go to the credit of the three associations. Reduction in manufacturing costs by the use of labor-saving machinery, universal application of sound accounting systems and, when necessary, unified action in problems like freight rates and the tariff—all legitimate and neither directly nor indirectly concerned with illegal price-fixing—have put the industry on a high plane.

Sales Are Growing

AND what about sales? Have the associations increased them? Well, nothing could be more vivid than the production figures themselves, from the Census Bureau. Here they are, from 1910 to 1925:

	Face Brick	Common Brick
Year	Amount	Amount
1910	697,857,000	9,221,517,000
1911	724,911,000	8,475,277,000
1912	814,007,000	8,555,238,000
1913	827,665,000	8,088,790,000
1914	810,395,000	7,146,571,000
1915	855,668,000	6,851,099,000
1916	1,002,762,000	7,394,202,000
1917	757,618,000	5,864,909,000
1918	356,394,000	3,556,519,000
1919	791,068,000	4,751,881,000
1920	786,614,000	4,851,126,000
1921	873,346,000	4,447,987,000
1922	1,416,878,000	5,898,898,000
1923	1,931,175,000	7,282,181,000
1924	2,030,403,000	7,158,714,000
1925	2,474,690,000	7,565,819,000
		the tenter

Paving brick is still to have its inning. The Arlington tests were completed too recently to permit the presentation of figures that mean anything.



1311 Swing Doors

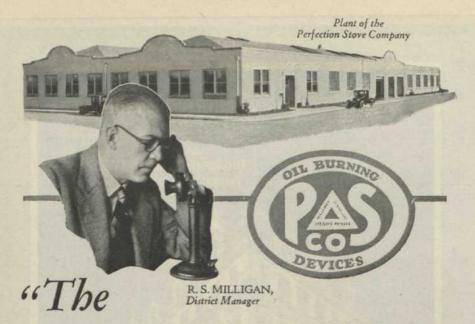
472 Elevator Entrances

67 Hose Cabinets

by

DAHLSTROM

Dahlstrom Metallic Door Company, Jamestown, N.Y.
Incorporated 1904 Representatives in principal cities



Ideal Distributing Point of the Pacific Coast . . ."

WITH its western plant located in the Oakland Industrial District, the Perfection Stove Company finds that this is the ideal distributing point. R. S. Milligan, district manager, writes:

"Certain outstanding advantages make Oakland the ideal distributing point of the Pacific Coast, from our standpoint, at least. These advantages may be summed up as follows:

- 1—Center of Pacific Coast population.
- 2—So situated as to speedily and economically serve the big local markets of the metropolitan area surrounding San Francisco Bay and the interior valleys of California from Fresno north.
- 3—Freight rate break between Mexico and Oregon line makes Oakland the economical point from which

- to serve these local markets.
- 4—Radiating lines, both steam and electric, give rapid transportation from plant to dealer.
- 5—Location on the continental side of San Francisco Bay, the terminal point of all transcontinental railroad lines, and having water and rail freight rate advantages over other cities in serving the larger portion of the Pacific Coast territory.
- 6—Oakland, as a port of call for principal steamship lines, assures prompt shipment in exporting."

Get the Facts! Send for New Booklet "We Selected Oakland." The above statement of the Perfection Stove Company is from only one of many nationally-known concerns which have given their reasons in this booklet for finding the industrial area of Alameda County to be the most advantageous location on the Pacific Coast. A copy will be mailed you for the asking.

A technical industrial report will be prepared for any interested manufacturer on request.

Write Industrial Department

Oakland Chamber of Commerce , Oakland, California

or the Chamber of Commerce of any of the following cities:

Alameda Berkeley

Centerville Emeryville Hayward Irvington Livermore Newark Niles Pleasanton San Leandro

On Guard Against Petty Blackmail

By HARRY W. HUEY

Associate Editor, The Ice Cream Trade Journal

THE nimble-witted gentlemen who defraud food-products industries of thousands of dollars every year will have to pick up their small change elsewhere. Thirty-seven organized groups of these industries have decided that they will no longer dole out hush money to those members of the ancient and dishonorable profession of blackmail who fortuitously find mice in milk bottles and rattails in cans of sardines.

Under the leadership of the American Grocery Specialty Manufacturers' Association, these industries have united for protection. A preliminary survey of the problem produced some illuminating facts. Fake claims of injury from consumption or use of food products are increasing. This increase is due, in part, to the disposition of manufacturers to settle claims out of court because of fear of unfavorable publicity attendant upon a trial. Finally, knowledge of this disposition to pay is spreading.

The present-day blackmailer runs few chances of prison. Stories of ptomaine poisoning that sometimes find their way into newspapers are the bugaboo of every food-products manufacturer. Blackmailers use this bugaboo to dig their way into the manufacturers' pocketbooks. In the majority of cases the blackmailers succeed, not because the manufacturers lack the gumption to defend themselves but because they fear the pitiless light of publicity.

Often, the blackmailers' unwitting aids are public health officials and physicians. Instances are on record where public health officials damaged the reputation of a food product by describing it as the cause of an epidemic without as careful an investigation as the situation warranted. Such official action is not maliciousness—it is simply carelessness, and the food manufacturer bears the brunt of the slip. Once the report goes out, the manufacturer is flooded with claims, some from imaginative persons but most from those who see a chance to make easy money.

An Unjust Claim Against Ice Cream

ANOTHER aid to unfounded claims is the physician who squints at a patient and then makes a hasty diagnosis. One of the many reports in the hands of the new organization of food-products industries involves a physician who was called to the home of a poor family. He asked the housewife what her family had eaten recently and she enumerated ice cream among other foods. The hasty conclusion was quickly given, "You have a case of ice cream poisoning."

The inevitable claim was filed, but the ice cream manufacturer sent his own physician to investigate the facts. What the first physician might have learned had he made careful inquiry was that the family, after eating nothing for two days, had

gorged itself on a rich potato salad and topped off the meal with ice cream for dessert. The combination of famished stomachs and rich food obviously caused the illness.

In this case, of course, and in many others similar to it, the honesty of the parties concerned was unquestioned. The instance serves, however, to demonstrate that thorough investigation, even though it may be more costly than the payment demanded, will save the food manufacturer money.

The conclusion of the food-manufacturing groups, after making a comprehensive study of the problem, was that the only cure for the fake claim evil was investigation and more investigation. This is the first item in the plan of protection. Recognizing that casual investigations may sometimes be insufficient, the organizations have made arrangements for the services of a nationally known detective agency. Its operatives are required to establish the facts of claims, the reputation of all persons concerned, and to learn whether they have ever participated in the prosecution of another claim.

The second item in this protective program calls for a flat refusal to pay groundless claims. For if the manufacturers set-tle without thorough investigation, they are virtually hawking their gullibility and making chicanery profitable. Threat of a suit is a blackmailer's intimidating gesture that can be paralyzed by an uncompromising refusal to be bilked. A claim honestly but mistakenly made presents no problem at all, for a friendly explanation of the facts usually satisfies the claimant. It should be noted here that the manufacturers have no desire to evade responsibility in those just claims which in this day of sanitary equipment and scientific control of production are so rare as to be almost negligible.

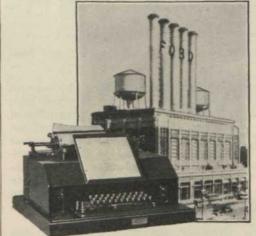
Fraud to Be Run Down

RECORDS of all claims will be compiled as a necessary precaution to expose repeaters and to unmask fraud. Criminal charges will be preferred against professional claimants and action for annulment of license will be brought against unscrupulous physicians or lawyers conspiring to aid them.

All laws upon the subject of claims will be compiled and published in manual form for the legal guidance of the manufacturers. As the statute law is spread through many sales acts and the case law, being in a state of development, conflicts on important points, a legal advisory committee has been appointed to seek correction and clarification. The major fault of the law is that it does not establish an equitable rule of implied warranty in regard to the sale by the dealer of plantpackaged foods which, obviously, are not subject to the dealer's examination.

Still further progress will be made in the elimination of fraudulent claims by the correction and retraction of erroneous newspaper reports of injury resulting from the consumption of food products. In the hurly-burly of newspaper work the time necessary for proper investigation of stories having minor news value is sometimes lacking and accuracy often fades into myth.

Ford Motor Co. uses this TELEGRAPHING TYPEWRITER for inter-plant communication



Ford's Highland Park plant, the Fordson (formerly River Rouge) plant and the engineering laboratory at Dearborn are linked by Teletype . . . the telegraphing typewriter.

Eight of these machines provide instant and accurate transmission of information between plants. Messages are received in printed form, precluding all possibility of error.

The Ford Motor Co. says: "An advantage of Teletype is that the sender sees what is being printed by the re-ceiving machine, placing the responsibility for accuracy on him. Four years' experience with Teletypes has proved them efficient and reliable."

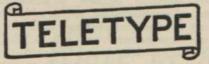
TELETYPE'S MESSAGES ARE RECEIVED IN TYPE LIKE THIS

Teletype legibly prints its messages on the ordinary typewriter page or on forms. Both sending and receiving machines make several carbons if desired.

One sending machine will transmit messages to 1 or 100 remote spots simultaneously. Thus orders and other instructions can be broadcast to every corner of your plant at the rate of 60 words per minute.

Teletype service is not expensive, and will pay for itself again and again by eliminating errors, doing away with messengers and speeding up production.

Teletype is widely used by industrial organizations, telegraph and cable companies, press associations and railroads. Without obligation, permit us to demonstrate how Teletype can save time and money for you.



TELEGRAPHING TYPEWRITER

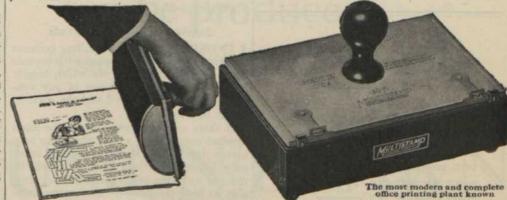
PIN to your letterhead

For further information, sign this coupon, pin to your letterhead and mail to Morkrum-Kleinschmidt Corporation, 1410 Wrightwood Avenue, Chicago.

Your name...

YOU CAN GET ACTION WITHOUT WAITING ON THE PRINTER

The quickest, easiest, simplest—most economical known means of duplicating letters, post-cards, notices, forms, etc. Type—handwrite or draw on a dry stencil—attach it to MULTISTAMP print perfect copies on paper, wood, metal, cloth—any smooth surface—40 to 60 a minute—right at your desk.



No. 6 Outfit—Consisting of all three sizes, with supplies, packed in handsome Steel Baked Enamel Finish Case. Themost complete officeprint-ing plant known. (F. O. B. factory—weight 20 lbs.)..\$50

THE MULTISTAMP CO., Inc., Norfolk, Va., U.S. A.—Agents and dealers in principal cities

BUILD your PLANT in SPARTANBURG-

Profits are not Devoured by Labor Costs nor Jeopardized by Labor Disturbances

No labor disturbances, no strikes nor walk-outs and and a negligible labor turnover due to the ideal living conditions of workers. A mild, even, bracing climate, with an average annual temperature of 60.4 assures healthy labor and continuous operation. Naturally, there is no interruption to industry in Spartanburg under such favorable conditions, and labor coats are 30% lower in Spartanburg, with mill construction costs 20% lower!

This Survey Tells
All—Send for your
copy today.

Many Other Advantages in Spartanburg



TRANSPORTATION—Two trunk lines to middle west. Two to Atlantic Coast. On main line of Southern Railway from New York to New Orleans. POWER—In the center of the country's great hydro-electric area and at the door of the Southeastern coal-fields.

water—Four large rivers and many small bold streams assure abundant year-round supply. coal—In close touch with great coal fields. Best grades of steam coal obtained at low cost.

LABOR—White, All-American, Intelligent English-speaking. Used to longer hours and productive work. Uniform wage scale. Greater total output at lower production costs.

TAXES—"No taxation tricks." Taxation basis very favorable to successful industrial operation.

AIR MAIL—Regular stop on U. S. Postal Air Mail Route, 6 hours to New York.

GET COMPLETE DETAILS—Write for survey applying to your own product. You will be surprised to learn how much more economically it may be manufactured here. Your investigation costs you

INDUSTRIAL COMMISSION CHAMBER OF COMMERCE 1400 MONTGOMERY BUILDING - SPARTANBURG, S. C.

SPARTANBURG



For the Exporter

FOR manufacturer or merchant looking overseas for new markets, a comprehensive 64-page booklet "Doing Export Business," a new guide book for the exporter, has been prepared by the Foreign Commerce Department of the United States Chamber of Commerce.

This publication is being distributed at cost, 15 cents a copy.

FOREIGN COMMERCE DEPARTMENT U. S. Chamber of Commerce, Washington

"Prosperity but no Profits" Again

The article in the August Nation's Business by Alexander C. Brown, president of the Brown Hoisting Machinery Company, "Prosperity but No Profits," touched a sore spot in present-day business.

Selling below cost is evidently known to many lines of industry.

The article drew much lively comment, some critical, but most of it approving. Here is a discussion of it by the president of an Ohio steel company and a few extracts from the many letters.

By W. W. GALBREATH

President, the Youngstown Pressed Steel Company

NY BUSINESS executive who looks beyond the single day in which he is working will agree that, regardless of conditions, basic material prices should not be driven below the level which represents a fair profit to the vendor. To take advantage of a seller's weakness-and his weakness may be either moral or financial-to coerce or bully him into selling his product without profit, is at best a shortsighted policy.

Eventually the buyer will lose by such tactics, for he will either ruin the source of supply or will have driven it out of the circle of producers who are competing for his business. In either case he suffers from his lack of foresight, and sooner or later the loss will exceed the saving. No man may tinker with the delicate mechanism of supply and demand and come away whole.

The buying and selling of basic materials, however, represents but a small part of our complete business structure. Each step of manufacturing, as it is added to the bare raw materials, brings with it new factors, new interests and new possibilities; and the further removed a product may be from the raw material, the greater the opportunities for profits. Each step broadens the outlook.

Certainly the man who scoops ore out of the ground is confined within narrower limits than the manufacturer who creates and produces the equipment for handling it. By the same token, the furnace which refines the ore into iron and the mill which eventually rolls it into watch springs enter an ever-broadening channel which finally reaches the craftsman producing the finished timepiece.

Survival of the Fit in Trade

I JNDERLYING and controlling business there are certain fundamental economic laws. Among these are two which largely control the failure or success of any venture-supply and demand and the survival of the fittest.

If there are four producers of the same product operating in a field which can only absorb the output of three, then it naturally follows that the profits of all will be reduced until the particular company least able to bear the pressure of extreme competition will gradually become inactive, or, through consolidation, pass into the control of its more able competitor. It can only continue to function by contributing to the community some article, process or service having sufficient economic value to justify its continued existence. Under such conditions each of the two laws has done its bit to bring about a proper balance, and it is just as useless to blame the buyer for having been the instrument used in the readjustment as to attempt sweeping back the tide of any other economic reaction.

There can only be a certain number of production units absorbed by a given number of buyers in a given time except through the constantly broadening needs of an ever-growing population. Supply and demand will control the price at which they may be sold, and the survival of the fittest will determine who is to produce them. The buyer is simply a means to an end. No combination in restraint of trade, no association for the exchange of trade information nor any code of business ethics can have more than a temporary effect upon the reaction of business to these laws.

This might appear to be a hopelessly stern situation for the seller, but the equalizing element is the fact that these economic laws apply with exact sureness to the buyer and the seller alike. The buyer who violates them is just as certain to be punished by either loss of profits or extinction as is the seller.

Struggle Prevents Dry Rot

WHERE would industrial America be today if it were not for the constant pressure brought by the buyer in his fight for lower costs? A casual glance at some of our foreign neighbors or even at certain sections of our own country clearly shows the result of smug content and the dry rot of monopoly. Picturing "Necessity as the mother of invention" may be trite but nevertheless true.

Without competition, without the buyer's constant pressure, many of our now profitable industries would have died by the wayside years ago.

Every finished product is composed of three major elements: raw material, labor and-ingenuity. Broadly speaking, raw material and labor can only go to a certain price level, and if these two elements alone made the finished product then we might view with alarm any effort of the large buyer to squeeze out the last penny of profit. But again there is a saving factor, the third element, ingenuity. So long as man can create new ideas there will be possible profits.

Witness the manufacturer of a certain small machine which is used all over the country. It cost \$600 to build. Competition grew and profits dwindled. Each new producer of the device, as he came into the field, whittled off a share of the earnings until the outlook seemed hopeless. A cut in the cost of raw material or the squeezing of a few dollars away from labor would have meant only temporary relief, but instead he applied the third element, ingenuity. Research and open-minded study brought out the fact that, by redesigning certain parts of the machine and using stampings, the strength could be increased, the shipping weight reduced, and the cost cut \$60 on each machine. You'd have a hard time convincing this manufacturer that there was anything destructive in buying pressure. The law of the survival of the fittest protects as well as punishes.

the fittest protects as well as punishes.

A manufacturer of electrical equipment, feeling the pressure of competition, changed his design, combined fifteen sizes of a certain part into three standards, used a stamping in place of castings, and by so doing cut the weight in half, reduced the number of pieces carried in stock and cut the cost per unit approximately 60 per cent.

The saving was effected not by squeezing labor nor by taking profits away from the vendor of some basic material, but by the application of ingenuity, which resulted in standardization and the adoption of an entirely different raw material. But for the buyer these savings and new profits would never have been born.

Improvements Due to Competition

FOR some years there had been no radical improvement in the production of sheet steel. A few minor changes had taken place in the process from time to time, but, in the main, sheet limitations remained fixed. Continual pressure for lower prices proved an ever-growing problem until the ingenuity of sheet mill executives and engineers developed a new process, a process which is practically continuous from the ingot to the finished sheet.

With the new process came a new product known as strip sheets. The labor cost has been almost cut in half, and strip sheets have opened new markets for their pro-

ducers.

Competition, the buyer, has given industry a new range of possibilities, and the ingenuity of still other executives will apply this new product to their problems.

The success of our entire industrial structure depends upon pressure. Where there is no activity there can be no life. Competition today is not simply a struggle between the sellers of any one industry but is a gigantic battle of one industry against another. Steel is fighting wood, gasoline is entering fields once controlled by steam, and in our homes a cup full of chemicals backed up by a quart-sized motor is chasing the ice-man out of the kitchen. As long as this activity continues there will be prosperity for those who earn it.

After all the facts are weighed, how shall prosperity be measured? By a single month's profits, the loss or gain for any one year or the net result of our advance over a period of years? And shall prosperity be judged alone by the profit or loss of a few scattered manufacturers or shall it be gauged by the earning capacity and the buying power of the greatest number

of people?

Regardless of what a few individual buyers may seem to attempt, except for short seasons of abnormal readjustment, the producers of basic materials and the suppliers of labor will receive a fair profit.

So long as the third element, ingenuity, is an attribute of astute management, there will be profit possibilities and profitable



There is almost an inexhaustible variety of special shapes in which Union Drawn Steel Bars can be produced \sim \sim

UNION DRAWN STEEL CO. Beaver Falls, Pa.

UNION DRAWN STEELS

When writing to Union Drawn Stem Co. please mention Nation's Business

The GLEN SPRINGS



IN all America, there is no other place like this—where the Radio-active mineral springs and the natural Nauheim brine baths offer you all the advantages of European Spas.

An estate of a thousand pine-fragrant acres. A setting of matchless scenic love-liness in the heart of the Finger Lake country. A splendid golf course. A justly famous cuisine, with private Dairy and Poultry farms. A daily concert program. Visit "The American Nauheim" this fall—and take off ten years!

The Baths and other treatments are especially suitable for heart, circulatory, kidney, nutritional and nervous disorders, rheumatism, gout, and obstity. Complete medical and hydrotherapeutic facilities, and modern aids to diagnosis. Write for illustrated booklets.

THE GLEN SPRINGS
WATKINS GLEN · NEW YORK
WILLIAM E, LEFFINGWELL, President

The Worker's Wife

THIS advertisement is about group insurance, a matter which is sure to come up for the consideration of modern business executives. Group insurance is no patent panacea for the employee problem; but it is a most potent help.

Consider only one angle: — the worker's wife. In case of death or disability to her husband it is she and her children who benefit by group insurance. This means that she is going to help you in the matter of the man's contentment and co-operation in his job.

This is only one of many far-reaching influences involved in group insurance.

We have two booklets, "Management, Men and Motives" and "Group Life Insurance," which throw light on this question. Your local John Hancock office will be glad to send them to you, or they can be obtained by writing to Inquiry Bureau

LIFE INSURANCE COMPANY OF BOSTON, MASSACHUSEITS

197 Clarendon St., Boston, Mass.

prosperity for those who have the vision, courage and stamina to reach out for them.

Letters for and Against

Following are excerpts from some of the many letters received commenting on Mr. Brown's article:

Everything that Mr. Brown says in the article is true and then some.

We are handling a number of trade associations here in our office, and every one of them is suffering from what we believe to be the unethical practices of purchasing agents. The constant pressure to which all of my members are subjected to break down and debase their prices below a reasonable profit-bearing level, is almost irresistible, and the result is that the margin of profit in all of the industries which we represent is constantly shrinking. It is this pressure on the part of the purchasing agent which is bringing up for constant consideration the question of policy involved in determining whether or not goods should be sold for less than the normal cost of production.

It occurs to me that you might be interested in a circular which I sent out in connection with a recent session of the National Association of Cost Accountants and tabulation which I made of the replies received to this circular. Of course, the tabulation shows merely the opinions of people who replied to the circular, but, as a matter of fact, I received several hundred detail letters dealing with this subject, and every one of them spoke with more or less bitterness on the unfair pressure to which they were subjected by unethical purchasers and the misrepresentation which they had to combat to maintain their position in the trade.

-CHARLES R. STEVENSON, Stevenson, Harrison & Jordan, New York, N. Y.

[The circular to which Mr. Stevenson refers asked for answers to a number of specific questions on the subject of "The Economic Effect of Taking Business at or Below Normal Cost."

To the question, "Do you believe that business should ever be taken at normal cost?" there was a wide division of opinion, a little more than half saying "yes" either outright or with some qualifications,

To the question, "Do you believe that business should ever be taken below normal cost?" three-fourths of the answers were "no." Nor did more than a small proportion believe that the theory of incurring losses to take business at or below normal cost with the idea of absorbing overhead is sound.]

Bad Practices Cited

The average professional man, as well as business men who do not come directly in contact with conditions outlined in this article, does not realize what is being done in the way of "purchasing profiteering," and this is the first time any publication has seen fit to broadcast the truth.

Conditions with respect to the purchase of raw or semi-finished products which are produced in relatively small quantities by a large number of manufacturers, located over a wide area, are even worse than in the case of manufactured products.

The consumers of these commodities and raw materials absolutely dictate the price at which they will purchase, regardless of the fact that the prices are below cost of production and are gradually reducing the number of producers of the commodity.

Drastic legislation has been enacted prohibiting the curtailment of production or fixing of prices. It has become the common practice for concerns to reduce the cost of



Painting Costs Reduced

Through the adoption of Matthews Mechanical Equipment hundreds of firms are reducing the cost of their maintenance painting by approximately 50%. How these savings are being effected is explained in the 12-page booklet, "Mechanical Painting for Maintenance". This booklet compares cost of applying paint on different kinds of surfaces; shows various Matthewsmachines; gives interesting experiences of users and other valuable information. Write for your copy. You will profit by reading it.

W.N. MATTHEWS CORPORATION 3758 Forest Park Blvd., St. Louis, U.S.A.

MATTHEWS MECHANICAL PAINTING EQUIPMENT

32-MP



Bureau of Canadian Information

The Canadian Pacific Railway through its Bureau of Canadian Information, will furnish you with the latest reliable information on every phase of industrial and agricultural development in Canada. In our Reference Library at Montreal is complete data on natural resources, climate, labor, transportation, business openings, etc. Additional data is constantly being added.

Development Branch

If you are interested in the mining wealth and industry of Canada or in the development or supply of industrial raw materials available from resources along the Canadian Pacific Railway, you are invited to consult this Branch. An expert staff is maintained to investigate information relative to these resources and to examine deposits in the field. Practical information is available as to special opportunities for development, use of by-products and markets, industrial crops, prospecting and mining.

"Ask the Canadian Pacific about Canada" is not a mere advertising slogan. It is an intimation of service—without charge or obligation—that the information is available and will be promptly forthcoming to those who desire it.

CANADIAN PACIFIC RAILWAY CO.
DEPARTMENT COLONIZATION AND DEVELOPMENT

J. S. DENNIS Chief Commissioner Windsor Station Montresi, Can. their raw materials, by coercion, by com-plaints that are not justified, and by any means, fair or foul, with the threat of blacklisting if the seller insists on his rights.

There has been no legislation and no sentiment expressed in the press against combinations to depress the price of any product, but, on the contrary, it looks as if the public and even the Government appear to encour-

age the practice.

The practice of placing orders for large quantities of materials, subject to monthly or weekly "releases," amounts to an option on the goods purchased without obligation on the part of the purchaser to take them; the simple failure to issue the "releases" has resulted in bankrupting many concerns who were still old fashioned enough to believe that our leading concerns would not stoop to such tactics. In certain lines of manufacture no other kind of orders will be issued. If there is an advance in the raw material, they call on the seller for all of it for delivery at the rate agreed upon. If they can purchase it for less, they purchase it elsewhere, and fail to send out "releases."

No concern can exist where a maximum price is fixed at which they must deliver, and where there is no obligation on the part of the purchaser to take the material ordered.

-E. W. Wiese, Vice-President, Thomas & Proetz Lumber Company St. Louis, Mo.

No One Prospers Alone

I find myself in general accord with Mr. Brown's conclusions with regard to people who practice this profiteering. Purchasers should properly desire to buy cheaply, but a really low price should not involve squeezing the seller on a particular bill of goods. It is better business to operate on the "live and let live" principle, keeping the seller in business and aiming at quality, reliability, regularity of supply, etc., which enter ma-terially into the question of real cheapness.

Although there still exists the tendency for business men to take advantage when they think they can safely do so, it is becoming more and more apparent that not very often does one's prosperity come by itself but is accompanied by the prosperity of others.

—F. L. LIPMAN, President, Wells Fargo Bank & Union Trust Co., San Francisco, California.

Inconsistent Economy

While on a trip, I bought a copy of Na-TION'S BUSINESS at a newsstand and just about threw up my hat with three cheers for NATION'S BUSINESS for printing this article.

Our members have gone through the same experience, and the condition which Mr.

Brown outlines is a general one.

The next to the last paragraph of Mr. Brown's article could well have been set out in big, black type. It is wonderful bunk for a manufacturer to talk about increasing the purchasing power of employes by paying high wages, and at the same time have his purchasing organization squeezing out not only all profit, but part of the producers capital in many cases, compelling them to reduce the wages of their employes to fur-

nish goods at the prices squeezed out.

—E. F. DuBrul, Gen. Mgr.,
National Machine Tool Builders' Assn Cincinnati, Ohio.

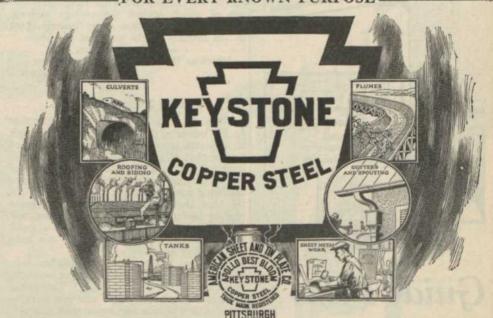
Plants Forced to Close

I meet many executives of other companies, particularly those who are manufacturers of accessories for the automotive industry, and there are growing signs of a



teel Sheets

FOR EVERY KNOWN PURPOSE =



CHEET STEEL—the material of exceptional utility, is rapidly gaining in popularity in all lines of industry and construction. Sheet Steel combines service with economy and widest adaptability. We manufacture a full line of

Apollo and Apollo-Keystone Copper Steel GALVANIZED SHEETS

Blue Annealed Sheets Electrical Sheets Black Sheets Full Finished Sheets Automobile Sheets Enameling Sheets Furniture Sheets Stamping Stock Formed Roofing and Siding Products Tin and Terne Plates. Etc.

For machinery construction and parts-automobiles and trucks, powerful tractors, threshers, harvester combines, implements for the agricultural and the industrial fields; and for lines of remanufacture and general building construction, this Company is the leading maker of Black and

Galvanized Sheets, Special Sheets, Tin and Terne Plates for every known use. Where resistance to rust is important, as for roofing, siding, spouting, culverts, flumes, tanks and similar uses, insist upon Keystone rust-resisting Copper Steel. Sold by leading metal merchants. Write for FACTS booklet.

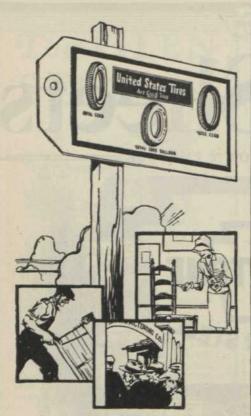
RICAN SHEET and TIN PLATE COMPANY, General Offices: Frick Building, Pittsburgh, Pa.

High Grade Steel Sheets and Tin Plates for every requirement

DISTRICT SALES OFFICES = Detroit New Orleans New York Philadelphia Export Representatives: Unite1 States Steel Products Company, New York City

Pacific Coast Representatives: United States Steel Products Company San Francisco, Los Angeles, Portland, Seattle, Honolulu

When writing to American Sheet and Tin Plate Company please mention Nation's Business



Guide Posts to Efficiency

-IN SELLING MANUFACTURING SHIPPING

PRODUCTS tagged with Denney Advertags sell more surely and more easily than those without them.

Work in process, safeguarded (by Denney Tags) against mistakes and losses, keeps down production costs.

And goods in transit tagged with Denney Tags reach their destinations -and on time!

If you appreciate the important part that good tags play in industry-or even if you don't-it will pay you to check and mail the coupon, attached to your letterhead, today.

NEY TAGS WEST CHESTER, PA.



strong revolt against the conditions so ably

set forth by your contributor.

A year ago we disposed of a large division of our business for no other reasons than those set forth, and I strongly endorse what Mr. Brown says, that certain laws which prevent what is commonly called price fixing or price agreements ought to be modified so that industries may protect themselves in-stead of being forced down into the valley of humiliation and bankruptcy.

I think this is eminently a case where Mr. Herbert Hoover could display his talents to full advantage, and if he raised the banner of revolt against the present obsolete legislation I think that every business man in the country would march at his heels.

A. H. D. ALTREE, V.-P., American Bosch Magneto Corporation, Springfield, Mass.

Lumber Business Feels It

Certainly what Mr. Brown sets out applies to his business, or he would not have such an intimate knowledge of the facts. I want to say that this also applies to the lumber business, and the "knock-down" tactics of the purchasing agents of the larger companies are being copied by those of the smaller. In this day and time, some purchasing agents wishing to buy even one car of lumber, will use unfair tactics in bearing down a reputable concern's prices, by playing one concern against another.

The value of one concern's lumber may be \$5 to \$10 per M feet less than another, but that makes no difference. The lower price is the "market price" and one is com-pelled either to take the business or leave it. Oftentimes, if one had the nerve to do so, he could get a better price, but competition in the lumber business because of overproduction is so severe that these unfair tactics often prevail, and it has cut the profit in both the manufacturing and the distributing of lumber to where the average investment brings a very inadequate return.

These unfair tactics are more largely practiced by the so-called purchasing agent, but

those higher up are also guilty.

The present trend of business and the ability of the larger corporations to dictate are alarming, and it is only a question of time until the effect will be disastrous on the general prosperity of the nation.

John Byrns, President, The Byrns Lumber Co. Cincinnati, Ohio.

And Brick

I have read with interest the article by Alexander C. Brown. The situation which he refers to applies with emphasis to the brick business.

It hardly would be appropriate to put on paper the things that I feel regarding some contractors in their contact with the brick manufacturers. Except at periods where the demands for brick were so strong that the builders were too busy to fight for price, the buyer has always made the price of brick.

The volume of common brick sales in the U. S. this year will probably equal that of any year since 1909 or 1910. Yet I believe that there will be very little profit made by the manufacturers this year. There is overproduction and the profiteering buyer takes advantage of this overproduction.

During the four or five years of reasonable prosperity the more progressive brick manufacturers have been building up their plants, adding modern machinery and ex-tending production. Another period of unprofitable operation is threatened for the industry. This will mean failure of some companies, the closing of many plants, and a cessation of the improvements to plants.

-RALPH P. STODDARD, Secy .- Mgr., The Common Brick Manufacturers' Assn. Cleveland, Ohio.

Price-Cutting the Evil

I read with a great deal of interest the article, "Prosperity but no Profits," by Alexander C. Brown in the August issue of Na-TION'S BUSINESS.

He presents a graphic picture of business conditions of today, and the particular in-dustries he singled out for his illustrations are by no means the only ones suffering from the "purchasing profiteer."

In the building industry if, under the sub-head "sliding down prices," you substitute "the general contractor" for "the purchasing agent," you will have a fair illustration of the average general contractor's methods of dealing with sub-contractors for the purchase of labor, material and equipment which he requires in the course of the construction of

a modern building.

Price-cutting is, beyond doubt, the greatest evil in the building industry, but rather than quote a fair price for a job the average general contractor depends on making his profit on the "cuts" he can compel the sub-contractors to make in order to get his business.

There is but one way to remedy this condition, that is, to educate the members of the industry to quote but one price, the right price, based on cost of production with a normal profit and under no circumstances make a "cut" in price unless "honest" revisions of specifications justify a revision of

-W. C. Markle, Secy., National Assn. Sheet Metal Contractors, Pittsburgh, Pa.

"Consuming Items" Affected

This condition, described by Mr. Brown, in the opinion of the writer exists particularly with those industries which are furnishing so-called "consuming items." By this, we mean a product sold to some manufacturer to be used by him in producing a finished product. The manufacturer who has a market represented by the direct consumer seems to be profiting.

We agree with Mr. Brown that present practices will prove a boomerang to those who continue to buy below the market price.

In our opinion, you would be doing a service if you could arrange to run further articles dealing on this subject. Some publicity should be given in the trade papers of all industries and national magazines, calling attention to the evils of the "purchasing prof-

> -R. C. McCaskey. The Coated Paper Products Co., Minerva, Ohio.

Defining the Ethics

I was much impressed by Mr. Alexander C. Brown's article in your August issue. It seems to me that profiteering is a very mild and inadequate name by which to designate the practices set forth. Lying, or chicanery, or crooked dealing, would be more accurately descriptive names.

I cannot see anything unethical in the practice of submitting specifications to competitive suppliers. If Mr. Brown thinks that the Brown Hoisting Company ought to have a monopoly in its line, he is wrong, of course, but when trickiness is employed to play one source of supply against another, when confidential prices are peddled, when deception is employed to extort unfairly low

CALINE SHIP BANK BALLOW

One Order the Salesman Didn't Take!



ORRECT motor application is with us the first and most important consideration. We are always glad to help work out a reasonable modification of either motor or appliance, if efficiency and economy are to be gained by it.

The Domestic Electric Company believes, in other words, that it is short-sighted business to penalize a job by selling something bigger and more costly than is required. Our engineers are guided by what their experience tells them is right electrically and mechanically, rather than by expediency or precedent.

The Domestic policy of developing the best motor that can be built for any specific purpose has always operated to the benefit of both the appliance builder and the appliance user. It assures lowest possible cost to the one, and most dependable service to

Our large and growing list of satisfied users—builders of appliances for industrial, commercial and household use-is best evidence of the soundness of this policy. A line of inquiry will bring details of this unique service.

> THE DOMESTIC ELECTRIC COMPANY 7209-25 St. Clair Avenue CLEVELAND, OHIO



FRACTIONAL HORSEPO

When writing to The Domestic Electric Company please mention Nation's Business



On investigation there, however, he discovered that if the design of the appliance itself were changed somewhat, a 1/10 horsepower motor would serve the purpose, the appliance would be immensely improved, and a considerable economy effected.

The Domestic salesman tactfully declined an order for 1/2 horse-power motors he might have had preferring the possibility of future business based on an efficient application, to the immediate sale of an inefficient application.



The Sneak-thief is Friendly



price proposals—then the manufacturer, or the railroad, or the mail-order house, or what-not, that resorts to such methods voluntarily lines up with the sneak thief and the porch climber

—H. H. Squire, Adv. Mgr., The Hinde & Dauch Paper Co., Sandusky, Ohio.

A Purchaser's Point of View

The writer of this article attacks the purchasing methods used by various buyers, and we are accused of being ruthless in the matter of forcing prices down to a point that means financial loss to the companies that furnish us the materials we need.

If this article is true, and I have no doubt that it is reasonably so, then are we not as purchasers only contributing to that vicious circle? If we will analyze the results, what we have saved in cost of goods bought is probably more than offset by lower profit on goods sold, if there has not been an absolute loss.

Is it too much to hope for a broader conception of buying and selling? As we get the larger picture, we can undoubtedly develop better team-work. If we can think of all business as one large organization, working for the same end, and therefore worthy of as much consideration as another department in our own company, then, perhaps, we will be fairer, not only to visiting salesmen but also to ourselves.

-H. O. MILLER, Dir. of Purchases, American Rolling Mill Co. Middletown, Ohio.

The Buyer Not to Blame

Having been on both sides of the fence, that is, in four railroad departments, inclusive of purchasing and stores, and also a salesman-mechanical demonstrator, and having followed the so-called game pretty closely for several years, and even now coming in close contact with the practices of manufacturing concerns as well as buyers, I must say that I take direct issue with Mr. Brown in some of his statements, and I do not believe, from these statements, that he has recently had a direct contact with the general field. I think he has drawn somewhat on his imagination as well as on some knowledge of flagrant cases on both sides of the fence.

On page sixteen, beginning with "But how do these same railroads buy their machinery and equipment?" Mr. Brown sets up a situation that does not generally maintain so far as railroads are concerned.

When it comes to the repair part items, with which matter I am more or less familiar, having conducted a study of production costs, manufacturing, and railroad costs manufacturing, and while admitting that the average railroad does not figure its costs correctly, I can recite to Mr. Brown, right in his own industry, not specifically his own company, where a machine part is charged out to a railroad at a price of \$85, a thorough analysis agreed upon by that same manufacturer showed a good price, carrying a satisfactory profit, to be \$65, and cost setup for reproduction on a casting contract of the railroad purchaser, and a cost setup agreed upon by the same manufacturer, showed that the part could be produced for

It takes more than one swallow to make a summer, and no one could condemn all of the equipment manufacturers based on the one case recited above. My contention is, after thirty years of experience, that the purchasing and sales situation today is on a very much higher plane than ever before, and that where manufacturing industry employs first-class buyers (and it is up to them so to do) and first-class salesmen, and where the railroad management employs first-class buyers (and they are more and more so doing), the evils spoken of by Mr. Brown, and rather by his inference a general practice, which I do not agree as a fact, will be more and more eliminated.

-M. E. Towner, Western Maryland Railway Co Baltimore, Md.

The Manufacturer Is at Fault

The article in the August issue of NA-TION'S BUSINESS, "Prosperity but No Profits," by Alexander C. Brown, president of the Brown Hoisting Machinery Company, is extremely interesting, and, no doubt, its remarks concerning profiteering buyers is applicable to many purchasing agents and other buyers, and certainly we need better ethics in business on the part of both buyer and seller; but it does not seem to me that the buyer should be as severely arraigned for his efforts to secure as low a price as possible, when my observation is that it is the manufacturer, through his salesman or his sales department, who has created in the mind of the buyer the necessity for beating the price down as much as he possibly can, and this is due to the insane desire of manufacturers since the close of the World War to accumulate business on their books beyond the demand.

The late Judge Gary is credited with saying on a public occasion that he defined the principle of cooperation as "an honest, earnest effort to secure and maintain among business rivals a fair, healthy, vigorous competition, and at the same time to oppose and to prevent an unfair, oppressive, cutthroat and destructive competition."

I agree with Mr. Brown that the higher executives of large corporations should take cognizance of the purchasing methods in some of their organizations, where, in many instances, they are directly contrary to the methods pursued by the sales departments of these organizations, in seeking business.

-ALVIN M. SMITH, Secy.-Treas., Southern Supply and Machinery Dealers' Richmond, Va.

Purchasing Agents Ask Light

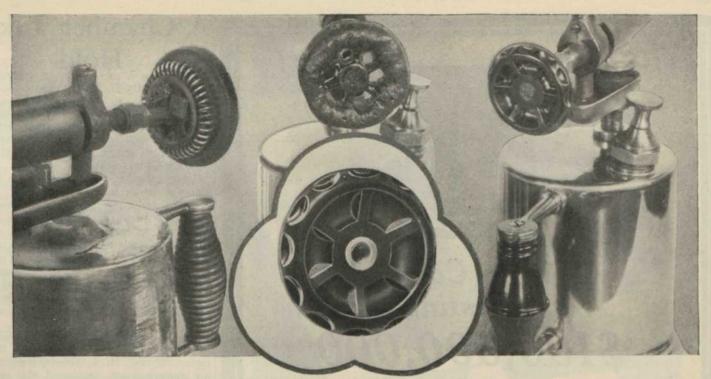
The article by Mr. Alexander C. Brown in your August issue should do much to improve buying standards because it serves to throw the light on a department that is all too often kept under cover for various and sundry reasons known best to higher officials of the company.

Try and get an article from some high official on his company purchasing policy and he will begin to hedge. He does this because the chances are he is using his purchasing department as a tool to help sales through the power of reciprocity, is buying his personal requirements on company discount, favoring golfing cronies or feels that buying is a ruthless game and the less said about it the better. If forced to come out and discuss buying policy, he would have to renounce these unsound policies, a thing he is not willing to give up.

The purchasing agent would like to see the light turned on. It would relieve him then of having to buy inferior goods from a company customer, would rid him of having to buy tires and jewelry for officials and officials' families; he would not have to favor a friend of the president and he could put buying on a higher plane and with greater credit to himself.

—J. RICHARD BROWN, Editor, The Southwestern Purchaser, Dallas, Texas.

BUY THE FENCE WITH THE STRONGEST POSTS"



"Giant Blast" Blow Torch with Bakelite Molded Wheel is shown at the right. The other two show how metal wheels must be protected. These torches are made by Huffman Mfg. Co., Dayton, Ohio

A "Never-Hot" Bakelite Molded Wheel made makeshifts unnecessary

INTENSE heat is generated in the valve of a blow-torch. This heat, transmitted by the valve stem, makes a metal valve wheel unbearably hot. Mechanics make it a practice to protect their hands from burns by providing metal wheels with some sort of makeshift insulation. The two examples shown at the left are typical. In one case a hand-cut fibre ring is used and in the other the wheel is bound with tape.

Because of the low heat conductivity of Bakelite Molded, 'valve wheels made of it will stay cool, and makeshift protection is not required. They may be handled comfortably and safely under all conditions. While the heat insulating property of Bakelite Molded was the primary reason for its adoption for the valve wheel of the "Giant Blast" Blow Torch, the makers say that it also provided the further advantages of improved design, better appearance, and lighter weight and that it has added to the prestige and saleability of their torch. All of these advantages were gained at no increase in cost.

This case is typical of thousands of others where the adoption of Bakelite Molded has made possible improved design and performance. Often these are accomplished at an appreciable saving in cost.

Bakelite Engineering Service

Bakelite Engineers, located in the important industrial centers of the country, form a field force of experts whose technical training is supplemented by thorough practical experience in the use of Bakelite Materials for the solution of a wide variety of production problems. One of these trained men is prepared to consult with you without delay, whenever you may send for him. Through him you secure the benefit of our comprehensive knowledge of phenolic resins and their applications, as well as the service of our extensive research laboratories. Send for a copy of Booklet 42, "Bakelite Molded."

BAKELITE CORPORATION

247 Park Ave., New York, N. Y. Chicago Office, 635 West 22nd St. BAKELITE CORPORATION OF CANADA, LTD., 163 Dufferin St., Toronto, Ontario, Can.

BAKELITE BAKELITE

THE MATERIAL OF

A THOUSAND USES

"The registered Trade Mark and symbol shown above may be used only on products made from materials manufactured by Bakelite Corporation. Under the capital "B" is the numerical sign for infinity, or unlimited quantity. It symbolizes the infinite number of present and future uses of Bakelite Corporation's products."

When writing to Bakelite Corporation please mention Nation's Business



A Single Company Investing \$100,000,000 in Virginia

AFTER an exhaustive survey of the United States, The Allied Chemical Corporation has come to Virginia to make an investment that will exceed one hundred million dollars.

Here they are building the greatest Nitrate Plant in the world. Contracts have been let for the first unit, costing ten million dollars.

Such investments are predicated on facts only. The reasons which have influenced this choice, as given in person by the President of The Allied Chemical Corporation to the Governor of Virginia, are:

Abundance of labor

Genial climate

Proximity to mines

Boundless power

Ample transportation by rail and water

Nearness to all eastern markets

The hospitable attitude of Virginia in inviting new industries

The certainty of favorable taxation both present and future, assured by the "pay-as-you-go" policy of the State—safeguarding against pyramiding bond issues and their ensuing taxes.

As a matter of course, other industries are following the example of The Allied Chemical Corporation in coming to

Virginia

For Information Address:

State Conservation and Development Commission State Office Building Richmond, Va.

A Chamber Takes Hold

By B. B. LOVINS

IN THE back of Mr. Average Citizen's head there is an ever-present question. Whenever some civic calamity happens this question crowds to the front and Mr. Average Citizen asks:

"Why doesn't the Chamber of Com-

merce do something?"

There are cases, of course, where the question is pertinent. There are also cases—untold numbers of them—where the question is not permitted because of a chamber of commerce's act of prevention. Present a civic calamity to a chamber of commerce with virile membership and wide-awake officers, and if any action is possible you can safely say that you've started something.

At the moment when conditions pointed to a successful summer business in Huntington, W. Va., H. A. Abbott, state banking commissioner, announced the closing of the American Bank & Trust Co. The reason given for closing was the depletion of reserves.

Commissioner Abbott, in his public statement, announced that plans were being worked out for the reopening of the institution and that further details would be forthcoming within a few days.

For almost sixty days the board of directors of the closed institution and the state banking commissioner endeavored to

effect a reorganization.

Plans were worked out, presented and as often discarded. In the meantime almost three-quarters of a million dollars in deposits were withheld from circulation. Three thousand depositors were anxiously inquiring for news.

On June 10 the Huntington Chamber of Commerce announced it would attempt a reorganization of the closed bank. With no precedents for guides, the Huntington Chamber of Commerce started upon its

program of work.

Chamber Works Out Plan

FROM this date the campaign of rehabilitation progressed on a definitely planned schedule.

First the campaign was worked out in detail—doubtful securities were eliminated, stockholders of the defunct institution were called upon to fulfill their responsibility of twice the value of their stockholdings, and all items were carefully prepared for the

public solicitation.

Many details not usually found in a bank failure were brought out upon examination of the records of the institution. The closed bank was the majority stockholder in one of the city's finest buildings, and a receivership would have called for a foreclosure of the mortgage held by eastern capital. This item alone would have meant the loss of more than a half a million dollars to the bank and other local stockholders.

The securities pledged by borrowers had been repledged by the bank. Business houses with loans as well as private citizens would have lost not only their deposits but would have faced actual bankruptcy because of called loans under a receivership. Private homes would have been sold under the hammer to relieve the demands of a receivership.

In fact, so many things were found intertangled that the committee became dis-

couraged at times.

Throughout all the preliminary work, the state banking commission cooperated heartily with the Chamber of Commerce and patiently awaited a working out of the plan.

After throwing out the doubtful securities held by the bank, the next job was to deflate the stockholdings in the office building. Stockholders in the office building were called upon to surrender almost one thousand shares of stock, and the remaining stock was reduced in value about two-fifths.

The holding company for the building was capitalized on a basis of earnings rather than on construction cost.

Prominent Directors Obtained

WHEN these things were accomplished a group of representative citizens were solicited to permit their names to be offered as proposed directors of the new bank. Sixteen men, headed by the president of the Chamber, agreed to serve as directors provided the buyers of stock in the new bank ratified the tentative board.

Because the futures of both the bank and the office building were so closely tied together, it was decided to sell both stocks as one unit with the provision that after the sale was completed one stock would be

independent of the other.

To the depositors of the defunct bank 800 shares of stock were allocated, business interests were asked to buy 800 shares of stock in plural groups, and the general public was allotted the remaining 400 shares.

The campaign proper was started with a general depositors' meeting. Despite the fact that announcement was made that no effort would be made to sell stock at that meeting, 60 shares were pledged after the meeting closed. In less than ten days depositors of the defunct bank oversubscribed their quota by \$26,250 and pledged themselves for more than \$70,000 worth of Certificates of Deposit to be due in three instalments of six, twelve and eighteen months.

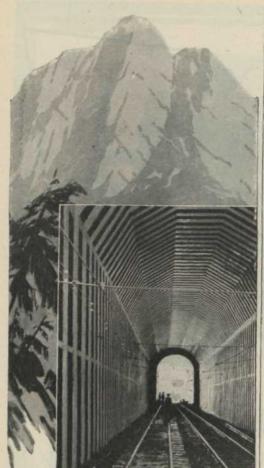
Stock in plural groups was sold to business and professional men as business insurance. This campaign also exceeded its quota, and the general public campaign was, more or less, a clean-up of odds and ends.

The entire program consumed less than twenty days of actual working time and represented a total of more than half a million dollars in a city of less than one hundred thousand population.

Within the next sixty days all the formalities of organization will be completed, the new bank will be opened, and three thousand depositors will have been saved from credit difficulties and bankruptcy courts. The new bank will start with ample resources and the good wishes of thousands of individuals from every walk of life.



When writing to Wisconsin Moron Mrg. Co. please mention Nation's Business



Building America's longest tunnel with durable Douglas Fir

A, GUTHRIE & COMPANY, INC., the contractors who are driving the longest tunnel in America through the Cascade range of mountains for the Great Northern Railway, depend upon structural timber of durable Douglas Fir to brace the roof and sidewalls while the work proceeds. More than four million feet of Douglas Fir will be used for this purpose—a use for which no other wood has sufficient strength, length, size and durability

Most widely useful wood

Douglas Fir is used for more building purposes than any other softwood. It is in wide demand for framing, siding, exterior woodwork, gutters, window frames, sash, interior trim, panels, doors and flooring, as well as for heavy structural pur-

Easy to obtain

Douglas Fir has a nation wide distribution—shipments to the Atlantic seaboard, alone, having increased forty-fold since 1919. It may be obtained in any size and grade from your local lumber yard. Booklets describing the many uses of Douglas Fir and the special uses of West Coast Hemlock, Sitka Spruce and Western Red Cedar will be mailed upon request. will be mailed upon request. Address, West Coast Lumber Bureau, 10 C Mount Hood Building, Longview, Washington.



The forests of the West Coast will produce an endless succession of trees—a permanent supply of lumber—for here natural forest re-growth is so rapid that in less than 50 years more lumber is produced per acre than after century-long waits in other regions.

Recent Federal Trade Cases

PROCEEDINGS before the Fed-

lated to its activities, for the month

are recorded here. The most sig-

held for manufacturers of golf

balls, dyers and dressers of skins

and pelts of seal and beaver, mak-

ers of mops, edible oil industry and

sion's "Philippine Mahogany"

Case to court to test Commis-

Trade practice conferences to be

nificant items are:

motion picture industry.

eral Trade Commission, or re-

A NUMBER of trade practice conferences are planned by the Federal Trade Commission for the near future. Trade practice conferences are held in the hopes that through the concerted action of an industry unfair practices may be eliminated.

Whether or not manufacturers of golf balls may pay salaries or other fees to professional golfers for playing exclusively with golf balls made by a particular company will probably be determined by members of the golf ball industry in a conference. Investigations by the Commission have revealed that there is some objection to such practices as:

(1) Payment of yearly salaries to profes-

sional golfers that they may travel over the country and play the golf ball of a particular manufacturing or marketing company

(2) Payment of special prize money to professionals who win matches or tournaments, by the company whose ball has been played by the winner

(3) Subsidizing professional golfers in charge of golf clubs either by outright gifts or by including an extra dozen purchased by them for resale.

(4) Making of special balls by companies subsidizing professionals to be used by them in special matches and tournaments.

ruling.

Dyers and dressers of skins and pelts of genuine and imitation seal and beaver may participate in a trade practice conference to discuss alleged unfair practices in this indus-The Commission is now trying to find out the sentiment of the industry as to whether or not such a conference is desired. If held, the conference will doubtless indicate whether the interest of the public is to be served best by proceeding with the trial of several individual complaints now before the Commission, or whether the industry by its own action desires that the practices in question be abandoned at one time by all the users thereof.

Makers of mops will be invited to attend a trade practice conference of the entire mop industry. One of the practices to be discussed will be that of imprinting the number "16" on the handle of mops. A few years ago one of the standard weights of the yarn in a mop was sixteen ounces, it is said, and this weight was imprinted on the handle. Then manufacturers began to omit the ounces and printed on the handle only the "16," it is averred. This practice is declared to have led to much confusion and misunderstanding when mops weighing less than sixteen but bearing the number "16" on the handles were placed on the market.

Seventy per cent of the representatives of the edible oil industry have assured the Commission of their desire to take part in a trade practice conference. Methods of packing salad dressings made from olive oil and cottonseed oil will be discussed. The ques-

tion of the weight of a gallon of oil is to be studied. A gallon of oil varies both in weight and volume with the degree of temperature at the time of packing and consequently packers have had difficulty in maintaining accurate measurements. The sale of cottonseed oil for pure olive oil salad dressing is another practice to be taken up at the con-

Producers, distributors and theater owners from all over the country will be represented at a trade practice conference of the motion picture industry. All kinds of alleged unfair trade practices will be called up for discussion, but one of greatest interest will be that of block

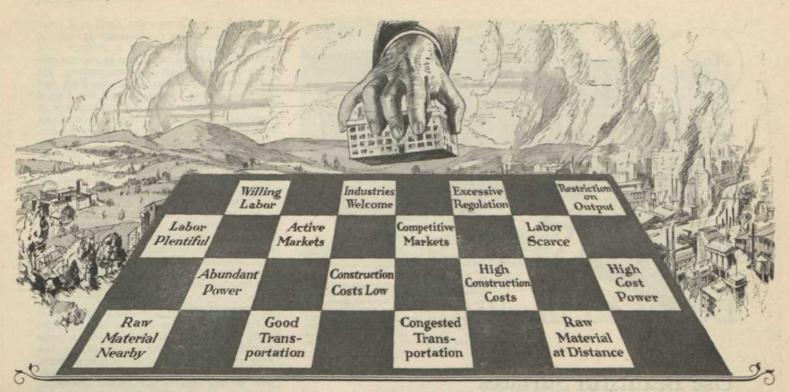
booking, involved in the Commission's order against a large producer-distributor. Block booking is described as the practice by dealers of leasing a group of films to exhibitors and requiring them to take all or none in the group, regardless of the exhibitor's wishes in the matter. The Com-mission expects that the conference will submit a well-de-fined set of trade principles which the majority members of the industry believe should govern its conduct. Commission believes attendance at the conference will be about 200, expect-

ing that numerous officials and owners other than delegates will attend. The prospective conference has been approved by a majority of the representatives of the motion-picture industry, the Commission says. Representa-tion of the producers and distributors at the conference is a simple matter, the Commission says, on account of their small numbers. With respect to the 20,000 unaffiliated theater owners, a plan has been evolved which provides for the attendance of two delegates from each of the 32 motion-picture distributing zones. Selection of these delegates will be made by the theater owners themselves, in the following manner:

Boards of arbitration are maintained in the key cities of each of the 32 zones. Six men act as a board of arbitration. Three of them are theater owners who are not affiliated in any way with producers or distributors. The three theater owners of each of the 32 arbitration boards will be asked to confer with the local organization of the theater owners and in conjunction with them to certify the names of two delegates who will attend the conference with authority to vote and otherwise act for the independent theater owners in the respective zones. No delegate will have any affiliation with producers or dis-tributors. One is to be selected from among the owners of what are known as "chain' theaters; the other from the so-called "in-dependent" owners, who operate from one to five theaters.

Twelve investigations of industries, trade organizations and trade conditions are being carried on by the Commission. This is the largest number of such inquiries ever before the Commission at a single time.

Four of the twelve investigations were in-



Move your PLANT to larger Profits

Why Business Moves to Larger Profits

A nation-wide survey of business migration shows that the following factors (ranked in order of their importance) were the chief elements that determine the degree of its

1. Markets and their availability:

Local Sectional National Export

Raw materials, availability and costs: Principal Secondary

wages and type: Male—skilled Female—skilled Male-unskilled Female-unskilled

Operations . Processes

Climate as it affects Processes Living Conditions

Taxation

Regulatory

These fundamentals of success affect every business, no matter where located. They affect your business, and every one of your competitors. Range the advantages on your side by locating in Piedmont Carolinas where these forces all work to benefit you.

K NOWING how sharp today's competition is, would you be willing to penalize sales by adding 10% to your costs?

Wouldn't you fight such a handi-

Wouldn't you go to almost any lengths to escape it?

Then-if you will please pardon the question - what measures of defense against it are you taking right now?

Independent industrial engineers (not located here) making surveys for clients situated as you are, have uniformly reported one amazing fact about Piedmont Carolinas:

Here, for many industries, is the Nation's focal point of manufacturing advantages - raw material, productive labor, transportation, power.

The differential, they state, is equal to a very substantial extra dividend.

By such an amount are competing goods penalized if they do not enjoy advantages that equal those of Piedmont Carolinas.

Experience of many enterprises shows that the expense of moving here is rapidly absorbed by reduced costs, increased sales and larger profits. It fades into a small item when contrasted to a long period of reduced operation-or complete shut-downin your present location.

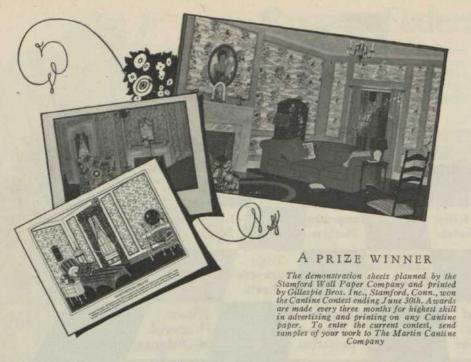
Why not move your plant to Piedmont Carolinas, to larger profits? Re-locate close to the low-cost focal point. You can command the advantages that cater to the market's demand for quality with economy.

This Book of Facts Tells You What You Want to Know

Exact data regarding the active Piedmont Carolinas market, labor supply, wages, raw materials, transportation, industries, climate, living conditions and all those things that affect a business. Condensed, brief, comprehensive.

Valuable to your sales and purchasing departments as well as you. Your copy is ready. Your request, addressed to Industrial epartment, 108 Mercantile Bldg., Charlotte, N. C., will be promptly fulfilled.

OWNERS OF SOUTHERN POWER COMPANY, SOUTHERN PUBLIC UTILITIES COMPANY & ALLIED INTERESTS }



Use Beautiful Surfaces to Sell Beautiful Surfaces

BEAUTY is surface deep only. Barren walls covered with a very thin decoration instantly become things of beauty and charm. The Stamford Wall Paper Company clearly demonstrates this through paintings of interiors reproduced in color on Cantine Coated Papers.

In planning your own booklets, catalogs or other literature, remember that it always takes beautifully surfaced paper to show beautifully surfaced merchandise adequately on a printed page.

The Cantine Mills have been devoted exclusively to the coating of paper since 1888. Here the art of coating has reached its highest development. For any purpose designing to show beauty in merchandise, you will find a Cantine paper that suits the requirements exactly.

Cantine jobbers service the country with quick deliveries. For free sample book showing Cantine Papers for all requirements, and name of nearest distributor, address Dept. 342.

The Martin Cantine Company, Saugerties, N. Y. New York Office, 501 Fifth Avenue

Cantine's COATED PAPERS

CANFOLD

ASHOKAN

Esopus

VELVETONE

LITHO C1S.

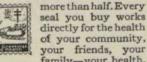


MAIL THAT CHECK

for Christmas Seals today

Has your local tuberculosis association mailed some Christmas Seals to you? Why should you keep them?

Here's the answer: Christmas Seals help finance the Tuberculosis Associations. These associations have already aided in cutting the tuberculosis death rate by



of your community, your friends, your family—your health. Send that check to your cal association today. Put he seals on your Christmas

Send that check to your local association today. Put the seals on your Christmas mail and packages and spread their message of health and happiness.

THE NATIONAL, STATE, AND LOCAL TUBERCULOSIS ASSOCIATIONS OF THE UNITED STATES

itiated by the Commission itself and mark "the first general and consistent exercise of the Commission's power to investigate business and industrial conditions at its own discretion." These four inquiries concern: (1) joint stock acquisition of the du Pont and General Motors companies and the United States Steel Corporation, (2) maintenance of resale prices, (3) sale of "blue sky" securities, and (4) practices in use regarding price bases. The remaining eight of the twelve inquiries were started at the direction of Congress. Two of these, those covering the bread and flour milling industry and the petroleum industry, are to be ready soon for submission to Congress.

Applications for complaints to the Federal Trade Commission on file September 1 totaled 490, while, in addition, 293 inquiries preliminary to applications for complaints, were pending. Thirteen formal complaints were disposed of in August, twelve by cease and desist orders and one through dismissal.

EXTENSION for a second 60-day period for the effective date of the Commission's order in Docket 835, against a large moving picture producer and distributor, has been granted. Among the unfair practices charged against the moving picture corporation in this case is the system known as "block booking." All orders of the Commission are entered with the provision that within 60 days the respondents shall report to the Commission concerning compliance with the orders. Extension was granted so that the respondent in this case could participate in a trade practice conference of the entire motion picture industry, which will probably soon be held. Further action of the Commission on the orders will depend, it says, upon the results of the proposed conference and upon whether or not the unfair practices con-demned by such a conference, and which the industry will undertake to eliminate, will cover the acts with which the respondents are charged.

A MANUFACTURING company of Lincoln, New Jersey, was ordered by the Commission to discontinue advertising by means of labels or other media that roofing paint, fluid cement or any other article offered for sale by the company contains as an ingredient "Trinidad Lake Asphalt," or "Natural Lake Asphalt" unless such product actually contains in substantial amount "Trinidad Lake Asphalt." It is generally understood that "Natural Lake Asphalt" is obtained from Trinidad Lake in the British West Indies. The company's paint or fluid cement does not now or has not since 1922 contained "Natural Lake Asphalt," according to the Commission.

An informal complaint against an organization of wholesale grocery jobbers alleged to have combined to interfere with the source of supply of "cash and carry" jobbers and chain stores was settled by stipulation. The wholesale grocery jobbers signed an agreement carrying five provisions to the general effect that they would discontinue all acts or practices designed to obstruct, hinder, or interfere with the sources of supply of cash and carry jobbers and the chain stores. Stipulation 63.

Another informal complaint settled by stipulation had to do with a firm engaged in purchasing seed from producers in states other than that in which the respondent firm did business and reselling such seed in interstate commerce. It was alleged that the company, in selling the seed, advertised itself as "exclusive producer" of such seed and asserted that the seed was grown in its own nursery in the county and state in which it did busi-

ness. It was further declared that the soil used in the nursery was a product of this county and was of unusual blackness and fertility, in fact, this county was the "garden spot of America." Stipulation 64.

A manufacturer of women's bloomers, negligees and articles of this class, agreed to discontinue use of the word "silk" in advertising products not manufactured from the product of the cocoon of the silk worm. Stipulation 60.

Another manufacturer of the same kind of goods as the foregoing as well as men's underwear and similar products, agreed to stop using the term "silk" to describe the goods made of materials other than silk. Stipulation 61.

A cigar manufacturer signed a stipulation providing for discontinuance by him of advertising as Cuban or Havana blend certain cigars not manufactured of tobacco grown on the Island of Cuba. Stipulation 62.

AN ORDER of the Commission issued in August against one of the importers of so-called "Philippine mahogany" will be made a test case for review in the second circuit court of appeals, the Commission announces. There are six of these orders in all (Dockets Nos. 1281-1316-1332-1323-1324-1325). proposed test case will be Indiana Quartered Oak Company vs. Federal Trade Commission. According to a stipulation entered into by all six companies and the Commission, everybody will be bound by the court's decision. Proceedings in a former case, that of Federal Trade Commission vs. Jones Hard-wood Company, which had been brought to test the Commission's orders in these cases, have been so delayed that the parties in interest have fixed upon the proceedings now proposed for the second circuit. The Commission's orders in these cases were practically all the same; they forbade the use of "Philippine mahogany" or "mahogany" on Philippine hardwoods because such woods are not, according to the Commission, true mahogany. In other words, the Commission forbade use of "mahogany" in advertising woods known under the trade names of red lauan, white lauan, tanguile, narra, apitong, bataan, lamao, almon, orion, batang, bagaac, batak and balachacan, or any other wood unless they are from the tree of the mahog-any or meliaceae family.

AN ORDER against a company of Lockland, Ohio, engaged in the manufacture of expansion joints used in paving, prohibits the use of any system of espionage by the company to obtain information as to facilities, capacities, operations or customers of a competitor without its consent. Circulation of misleading statements regarding the ability of a competitor to fill orders or make deliveries, or concerning the acceptableness or adaptability for the use intended of his product, or with reference to his financial standing, business or business methods is also prohibited in the Commission's order. (Docket 1184.)

A CHICAGO seller of gymnastic and physical exercise instructions by mail has been ordered to discontinue the use of false and misleading advertising. The particular copy complained of was two sets of pictures of individuals entitled "before and after" showing them supposedly much benefited by the exercises. Using this copy and any other like it was forbidden. (Docket 1394.)

Copies of the Commission's complaints, respondents' answers, and the Commission's orders to "cease and desist," or of dismissal may be obtained from the offices of the Editor of Nation's Business, Washington, D. C., without charge by reference to the docket number. Transcripts of testimony may be inspected in Washington, or purchased at 25 cents a page from the official reporter, whose name is obtainable from the Commission.—The Editor.



Movies....Radio....Lindbergh....the passing parade presents a swiftly moving picture. Yesterday's ideas are as old as a last year's bird's nest.

Buildings are not built of wood. Iron and steel, brick and concrete. Partitions are Mills Metal. Why? Because they are standard size interchangeable units. Shipped from factory to job just like so many brick—ready to use. Standardization. Straight line production. Economy. Service. Better methods. That's Mills Metal Partitions.

There is a Mills Metal Partition for every purpose from the least important factory department to the finest office. Any size office or department ready when you want it. And the partitions are never hauled out in a wheelbarrow—always there; a permanent part of your investment.

"Making Money With Mills Metal" is a booklet that tells how you can save money on partitions.

Sent free if you write for it

THE MILLS COMPANY

900 WAYSIDE ROAD CLEVELAND, OHIO

NEW YORK 7 West 42nd St. Phone Longacre 20263

CHICAGO
1216 First National Bank Bldg.
Phone Dearborn 6100

DETROIT 2231 Park Ave. Phone Randolph 3000

Representatives in more than fifty principal cities



Your <u>best</u> friend Abroad

Sophisticated travelers have good cause to speak affectionately of their "sky blue" American Express Travelers Cheques as their "best friend abroad."

Human companions may desert one—cash can be lost or stolen—but nothing short of your own second signature can dissipate your travel funds when you use the "sky blue"

American Express Travelers Cheques

Too, one knows his "sky blue" Travelers Cheques speak a universal language; that they can be used as a means of exchange even where natives may be ignorant of coinage value.

But, best of all, is the comfort and thrill of knowing that in practically every place and every predicament your "sky blue" Cheque gives you the privilege of calling on an American Express office, representative or Courier for immediate advice and guidance. Truly, the "sky blue" Cheque will be your best friend abroad.

American Express Travelers Cheques are issued in \$10, \$20, \$50, and \$100 denominations—bound in a small, handy wallet—and cost only 75c for each \$100.

FOR SALE AT 22,000 BANKS AMERICAN EXPRESS AND AMERICAN RAILWAY EXPRESS OFFICES

American Express Travelers Cheques

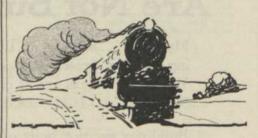
Secure your steamship tickets, hotel reservations and itineraries; or plan your cruise or tour through the American Express Travel Department.

Chips from the Editor's Work Bench

By Raymond C. Willoughby

AN INCREASING industrial emphasis on safety does not wholly explain the operation of a great railroad for nine years without a fatal accident. Method and reasoned plan resided in the Great Northern's ability to carry those 58,702,922 passengers in safety for an average distance of 92 miles. That sort of accomplishment argues a high degree of skill and training in the operating departments. And fact bears out opinion, for the company maintains a sort of engineering college on wheels. On the 6,000-mile route of this five-car train are division points and terminals.

One car is equipped with models of air brake machinery, feed water pumps, valves, and steam injectors. The chairs between



the rows of machines will seat thirty men. In another car, lectures on the signal system are given to a class of fifty men. In the third car, motion pictures are used to illustrate lectures on safety appliances. A business car and an observation car are provided for the instructors and examiners. The instructors are specialists in engineering and safety education. That they have done their work well is attested by their company's operating record. With high-speed schedules everywhere in effect, the motto most appropriate for our railroads would seem to be "safety fast."

WHILE there is a proper national inwater-borne commerce, concern for the amount of prepared medicines in transit seems strangely individual and local. Yet we read that the United States is the chief factor in the international trade in prepared medicines, with annual exports 50 per cent greater than Great Britain, its nearest competitor. According to census figures, the value of patent medicines and druggists' preparations manufactured in this country in 1925 was nearly \$320,000,000. During that year our exports of those commodities attained a value of nearly \$20,000,000.

The total import trade of the world in all forms of medicinals amounts to approximately \$110,000,000 each year. Of that total, two-thirds are credited to prepared medicines and medicinal specialties. Between 20 and 25 per cent of this commerce is held by the United States. Appraising the trade by continents, the Department of Commerce shows that the annual imports of the world have these values: The Americas, \$27,000,000; Europe, \$20,000,000; and the Far East and Africa,

There is no country not penetrated by

American drugs, the Department assures, declaring that the rapidly increasing volume of our export trade indicates that sales efforts have been fruitful of results. A way of saying that the sun never sets on the American drug salesman. At any rate, the evidence is that the salesmen are in strategic positions for the peaceful occupation of foreign interiors. Fortify their waterways as they will, other nations will find it increasingly difficult to deny that America is establishing a profitable protectorate over the world's alimentary canal.

I T WAS all right to say "I've got your number" until the chemists got around to making digital specifications of odors. A system developed in the laboratories of Arthur D. Little of Cambridge, Massachusetts, recognizes four decisive qualities in its numerical definition of odors. These odor types include the fragrant type, with the sweetness of flowers; the acid type, with the sourness of vinegar and camphor; the burnt type, with a tarry smell; and the caprylic type, which has a goaty or almost putrid pungency.

By comparison with carefully chosen standards, the relative intensity on a scale of nine of each of the four component odor-types present may be closely approximated, and the entire odor expressed as a four-digit number. For illustration, the chemists cite the odor of vanillin, the active principle in vanilla extract, which they have determined as 6021—meaning that it is as fragrant as standard 6 of the fragrant series, as nearly free from acid as standard zero of the acid series, and burnt and caprylic as standards 2 and 1 of the burnt

and caprylic series.

On the word of the chemists, no odor has yet been found which cannot be adequately defined in this way. And why not scale the constituents of human nature, too? An age that can base its intelligence ratings on plain, fancy and assorted questions could easily fashion a new faith from this odor scale. Telephone numbers, house numbers, and automobile license tags would supply revealing figures. Attainment of the unalloyed sweetness of nature indicated by "9000" would be rare, of course. As in other personalities, the danger here is that comparisons might become unpleasantly odorous.

MOTION picture stars in Austria are paid by the day, the best of them getting around \$85, and the lesser lights drawing down from \$28 to \$43. When the studio whistle blows and the big and little stars call it a day, the grind has netted each of them from 600 to 200 schillings. "Extras" get only 15 schillings a week. If they are lucky enough to own a dress suit, they rate another 10 schillings—about \$3.50 in the coin of this realm. There's a tip for the waiters.

These incomes, dredged up by our ever diligent Department of Commerce, are well calculated to whet domestic fear of competition from "pauper foreign labor." Can

In less than half the time with half the former labor, the Super-Speed Protectograph imprints checks for the State of Iowa

IN THE State of Iowa Department of Banks, a Todd Super-Speed Protectograph is in constant use.

E. P. Walker, Asst. Director of Receivership, says of the Super-Speed:

"This machine saves from one-half to two-thirds the time in getting out dividend payments. It enables one girl to do the work formerly done by two or more. We find it very satisfactory and would not hesitate to recommend it very highly to any office where a great many checks are written."

The Super-Speed Protectograph is saving time for banks, business houses and industries everywhere by imprinting checks with a clear, legible amount line that defies alterations—and doing it at the



1200 checks an hour

astonishing rate of 1200 or more checks an hour!

The imprint of the Todd Super-Speed is shredded into the paper itself in two colors of indelible ink. It protects the check from the ever-active check raiser, provides an attractive, quickly read, unmistakable amount line and identifies a check as an instrument of modern business.

The economy, speed and efficiency this machine will

introduce into routine will be demonstrated by a Todd representative at your convenience. There is a Todd office in every important city. A request under your letterhead, a phone call or a wire will bring a Todd expert to your organization to show you what the Todd System will save you in check preparation. The Todd Company, Protectograph Division.

(Est. 1899.) Rochester N. Y. Sole makers of the Protecto-graph, Super-Safety Checks and Todd Greenbac Checks.

THE TODD COMPANY Protectograph Division 1130 University Ave., Rochester, N Gentlemen: Please send me fur formation about the Super-Speed Protectograp Todd Check Signer	ther in-
Name	HE.
Business	
Address	20.



TODD SYSTEM OF CHECK PROTECTION

A Chance for Creative Capital

Almost all cities and countries offer opportunities for investing capital. By that is meant money which is loaned or which is obtained from bond issues. Capital invested in bonds and in loans yields a small return. There are any number of business men who want their capital to create wealth and to yield big returns.

Of course, to the creative mind able to command money, any city offers some opportunity. But in the City of New Orleans there is an unusual opportunity. This city is destined to be one of the great manufacturing centers of the world. There are fundamental reasons why this is so-a primary market for raw materials; a transportation center; low cost of living for labor, consequently lower labor costs-but beyond this, there are great natural resources awaiting manufacturers with vision to utilize

For instance, the manufacture of woods into furniture, woodenware, etc.; the de-velopment of the manufacture of cellulose products; the utilization of almost pure lime found in oyster shells; the manufacture of products from rosin and turpentine, from oil, from salt, from sulphur. Then, of course, there are innumerable commodities that can be imported at lowest cost from across the seas. There are many opportunities for progressive business men with capital to establish profitable industries either with their own resources, or in conjunction with local or other outside

We will gladly furnish you with a complete confidential report, covering any activity in which you may be interested. Write us today. Address Room 202.

NEW ORLEANS

ASSOCIATION of COMMERCE

Where production costs are lower

America's plutocratic sheiks and shebas hold their place in the Kliegs against the cheaper wiles of these schilling shockers? If we know our movies, the Vienna salaries would signify only cigarette money when weighed with a Doug Fairbanks scale.

That there is a marked difference between the reel money and the real money earned by some screen celebrities may be contended with fact. Yet it is a fair question whether truth would serve us better than the pleasant myths about people who work and play in a world of make-believe. What matter that the platinum dog chain of a famous leading woman shrinks to a leather leash, or that her fleet of Rolls dwindles to occasional use of a director's car? Along with the touting, the ballyhooing, the puffing, the boosting, the booming, and the flogging of long-suffering superlatives, a good deal of hard work is done in the studios. Life in the movies is not all beer and schillings, even in Vienna.

NOT many members of the business community are likely to know, off-hand, their chances for getting wet when going to and from work. To some the rain always seems to come at nine and five, with little time off for lunch. As a matter of local fact, the weather bureau at Kansas City found that during the period from 1906 to 1925, inclusive, 91 storms occurred at 5 p. m.—more than at any other time. The hours next in the number of thunderstorms recorded were: 3 a. m., with 84; 7 p. m., 83; 8 p. m., 78; 4 a. m., 76; and 10 p. m., 69. At noon, 29 storms occurred; at 8 a. m., 31, and at 9 a. m., 24.

Whatever the other benefits of this official rain gauging, it seems adequate to amend Mark Twain's complaint about the



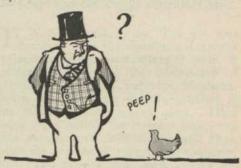
state of our meteorological science. Something is being done about the weather. Out west in Chicago, as easterners will have it, a citizen has proposed that ropes be attached to town clocks, so that when the "ropes contract or expand" under the effect of humidity, the clock bells would give an alarm of approaching rain. Ingenious as the suggestion is, it should not be taken too literally. It makes it too easy to say, "give a forecaster enough rope and he'll turn to a bellweather."

FOUR out of five have pyorrhea, one out of six has a motor car, and one out of eighteen has a radio, but how many of us have buggies? It is no answer, of course, to say "Who cares?" The Census Bureau cares, and it has something to say about the allotment of buggies. In 1925, the Bureau tells us, only 20,486 buggies were manufactured. And for 1926, the number dwindled to 8,854.

True, it is not yet necessary to go to museums to see one of those smart looking, side-bar "rigs" in which country boys—

and town boys, too, for that matter—used to entertain the young ladies of their favor. A good many of those snappy turnouts were long ago given the air and now survive only as weather-beaten ruins behind the stables that once sheltered their glossy prime. Well, it is not likely that the buggy will come back. It was an excellent transmitter for the "sparking" of an earlier generation. For the flaming youth of this day it is just another non-conductor.

So Long as eggs are sold in the original package their innards probably will always be rated a bad risk. But there seems no reason why they cannot show a spotless shell to the world. So must have



thought Harry Kennedy of Berkeley, California, when he began work on a machine that would clean eggs by means of a sand blast.

Egged on by the increasing fastidiousness of public taste, the produce industry is showing a capacity for progress far beyond the business caliber measured with the flippant phrase, "big butter and egg men." It is common knowledge that they are making the American egg earn approval through the searching test of the electric lamp. Not so long ago our eggs sought salvation by candle light.

And now one good egg may say to another, "Why envy a clean shell? Use the sand blast and have one." Certainly Mr. Kennedy is in a figurative way of showing that grit mixed with brains can put a good front on the matter. The whole world could approve his kind of shell shock.

THERE is no great surprise in the news that the General Electric Company has established a course in rural electrification. Years ago, the farm-mindedness of the company's chairman, Owen D. Young, had made the need articulate in a prophetic speech. "It will not do," he said, "for the electric power companies to send men to the farms who do not know on which side of the stanchion to install a milking machine. One reason why the farmer has not been openminded is because the people who have been trying to sell him electric service have really known nothing about his needs."

That defect is now in a fair way of remedy. The course will be administered at Schenectady by the sales training department. In the first class are five students, all of whom were already familiar with farm problems by reason of their own farm rearing and their mastery of college courses in agriculture.

In this course is the promise of providing a considerable group of specialists in farm electrification. With them as a nucleus, the utility companies should be in

What about your foremen?

Have your foremen a sensible incentive to keep up quality, high effectiveness of labor, and low cost of production? And have you an adequate measure of what your foremen should accomplish?

What have you done to change your foremen from glorified workmen to productive executives? Have you given them a genuine opportunity to develop their men and themselves?

Foremen are of key importance. Through them your policies are presented to your employees. Is this presentation being made by men whose vision has been limited to the making of pieces in their departments?

The Bedaux Principle of Human Power Measurement dignifies the foreman, compensates him on the right basis, and enables him to show his real worth and develop more worth. "Bedaux" does the same thing for other labor, direct and indirect. In doing so it reduces costs, and increases wages. The average reduction in costs made by "Bedaux" in 135 plants in every field of industry has been 20%! And at the same time the average increase in wages has been 15%!

"Bedaux" achieves these remarkable savings by dealing with the human element alone, and without expense for new machinery or equipment. Let us give you details.

The Chas. E. Bedaux Companies

OF NEW YORK 271 Madison Ave., New York City Douglas S. Keogh, President



OF ILLINOIS

435 North Michigan Ave., Chicago, Ill.

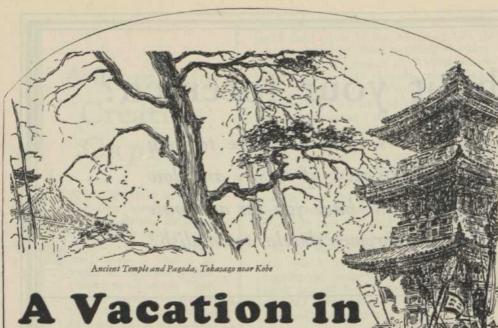
Albert Ramond, President

OF PACIFIC STATES
Pacific Building, Portland, Oregon
CHARLES W. ENGLISH, President

CHAS. E. BEDAUX, LTD.
Bush House, Aldwych,
London, W. C. 2, England

DEUTSCHE-BEDAUX GESELLSCHAFT, m.b.H.
Bahnhofstrasse 9, Handelshof
Fannover, Germany

SOCIETA ITALIANA BEDAUX 41, Via Carlo Alberto Turin, Italy



Japan

Japan holds much to lure the traveler. Go there this delightful way.

Magnificent President Liners, speedy and luxurious. The ocean voyage passes all too quickly on these fine ships.

Public salons are tastefully appointed, decks are spacious and enclosed in glass. All staterooms are outside, many with private baths in connection. You are assured fine service and a cuisine of highest quality.

First you land at Yokohama, the gateway to Tokyo, the capital. Or you may go to Japan via Honolulu if you choose. Then Kobe, Japan's greatest seaport, a splendid modern city. Plan to see the

beautiful interior with its snow-capped peaks and waterfalls.

Japan is rich in contrasts-colorful kimonos and rickshaws-modern buildings and industrial activity. The people are gay; there is a festival at every season, unique sights, 20th century comforts.

Go on to Shanghai, Hong Kong and Manila, each fascinating and different, offering the interested visitor new scenes and experiences. China, the essence of the Orient, maintaining its ancient charm. Manila, city of many races, situated so strategically at the crossroads of the Pacific.

A Dollar Liner sails every week from Los Angeles and San Francisco for the Orient (via Honolulu) and Round the World.

An American Mail Liner sails every two weeks from Seattle for Japan, China and

Fortnightly sailings from Boston and New York for the Orient via Havana, Panama and California. Fortnightly sailings from Naples, Genoa and Marseilles for Boston and New York.

Full information from any steamship or railroad ticket agent or

Dollar Steamship Line American Mail Li

32 Broadway
1018 Bessemer Building
101 Bourse Building
1514 West Sixth St.
Robert Dollar Building
San Francisco, Calif.

604 Fifth Ave. and 25 Broadway
177 State Street
Dime Bank Building
110 South Dearborn St.
Chicago, Ill.
1519 Railroad Avenue South
Check South
Seattle, Wash.

excellent position to undertake a comprehensive program of rural extensions. That they are alive to the opportunity is attested by the number of applications for the services of the men now under instruc-

Certainly the field is large and inviting. By report of the National Electric Light Association, 175 tasks may now be performed on the American farm with the use of electricity. From agitating a cheese vat to sawing wood, the list includes an extraordinary variety of ways of saving labor and of increasing farm production. Milking, butter making, and acceleration of the hen into greater output are farm employments which have been taken by electricity long enough to penetrate the townsman's consciousness. But not many city dwellers could get their imaginations up to picturing the electrical chore boy baling hay, warming young pigs, stimulating plant growth, coloring fruits, grading apples and gooseberries, and scrubbing floors.

These items are not the insubstantial fruits of hopeful fancy. They are realities that signify industrial victories in driving out drudgery. No play on words is needed to give meaning to the fact that the women on 227,000 American farms now know a brighter day because of electrical labor saving and its personal promotion by pub-

lic service companies.

MEAT packers and meat dealers want more good providers to bring home the bacon-and another slice or two of the ham, if you please. It is not necessary to go the whole hog or none. Purchase of half a ham will please the packers, they explain, in announcing the raising of a fund of \$300,000 to finance their share of a campaign to advertise hams and bacon. Joined with them in this graphic glorification of meat are the National Live Stock and Meat Board, and the National Association of Retail Meat Dealers.

It is a little incredible that meat should have to plead for place in the American stomach. Yet it is readily apparent that the old firm of meat and drink have had to admit new members. No longer do they fill vacancies alone. Hosts of other edibles daily splash in printer's ink to press their claims for the palate's preference. While most of the alimentary canal traffic is one way, congestions and tie-ups are not rare.

Still, considering the enormous volume that is moved on approval, the small number of rejections and returns is surprising. There are times when a stomach must wonder whether it does have a constitution and "pure-food buy-laws." Advertisers of meat and other food products will do well to observe the stomach's first rule of order, "make your reservations early and avoid the rush."

L ABOR banks are still enough of an in-novation in the modern business structure to give reports of their operations the quality of interesting news. From a tabulation made by the industrial relations section of Princeton University, it appears that of the thirty-six labor banks in operation at the end of 1926, thirty-three survived at the end of the first six months of the current year. In that time the resources decreased from \$126,015,666 to \$124,655,752.

Although the trust companies operated in Philadelphia and in Birmingham by the Brotherhood of Locomotive Engineer passed into the hands of business interests this elimination did not greatly reduce the aggregate of labor bank deposits, which decreased during the six-months' period from \$108,667,133 to \$108,478,242. But capital, surplus, and undivided profits, considered in the aggregate, declined from \$12,765,449 to \$11,911,420.

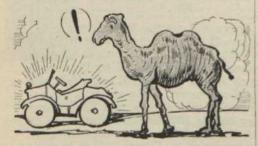
While the labor banks in most cities continued to gain in deposits and resources, decreases in several of the larger banks prevented a continuance of the rate of growth shown last year. The thirty-three banks now operating increased \$2,319,914 in deposits and \$2,087,998 in aggregate resources during the six months compared to increases of \$13,487,107 in deposits and \$15,218,911 in resources in the banks oper-

ating throughout 1926.

Occasionally, reverberations of difficulties in the operations of the engineers' banks have reached the public ear. And certainly the scope of their ventures was large enough to attract general notice. It is only seven years since the Brotherhood entered the financial field, yet, within that time, it acquired ownership of fourteen banks, eight investment companies, an insurance company, a printing plant, sky-scrapers in Cleveland and in New York, and 30,000 acres of Florida land. Corporations and holding companies were formed by officers and members for the purchase of coal mines, dairies, laundries, and other enterprises. At one time, the combined resources of all their banking institutions, extending from New England to California, were estimated at \$89,447,709.

In that rapid expansion, their purpose was, perhaps, only a sensitive responsiveness to the temper of the time. But the troubles that have become apparent in labor capitalism give point to the old lesson that an exhilarating sense of prosperity can never counsel so wisely as the accumulated experience of successful management.

HORSEPOWER under the hoods of motor trucks is outdoing the traditional camel as a commercial beast of burden in Australia. Used for many years as a connecting transport link from railroads to places in the dry inland areas, the ships of the desert are yielding to fleets of mo-



tor cars. Only a dollar each was obtained for the camels in a herd put up for auction in a backwoods district of New South Wales. That low level of value raises the suspicion that mighty few buyers took the steps so impressively promised in the cigarette advertisements.



Blaw-Knox Buildings

lowest cost per year buildings that can be obtained

Divide the initial cost by the years of service and you will find Blaw-Knox Standard Steel Buildings extremely economical—the lowest cost per year buildings that can be obtained.

Their long life is built in through the use of copper-bearing, galvanized steel sheets, material which resists corrosion to the utmost. Patented, interlocking joints avoid seams and openings and provide weathertightness. Roof sheets are fastened together without holes and roofs are insured for ten years against corrosion and disintegration.

Blaw-Knox predesigned Steel Buildings are made in standard units and quickly erected with the guidance of standard erection plans, or can be erected by our own erection crew-part of the building service.

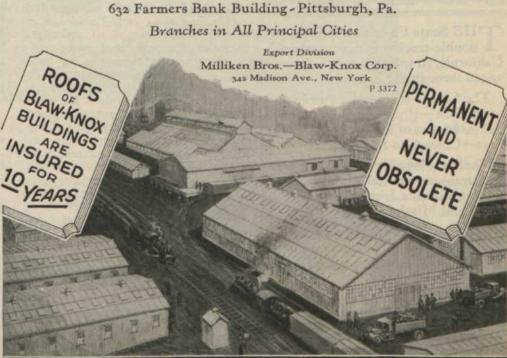
Blaw-Knox Standard Buildings are serving all of the major industries of this country in every way in which one-story buildings can be efficiently

Send for further details and illustrated literature.

BLAW-KNOX COMPANY

632 Farmers Bank Building - Pittsburgh, Pa.

Branches in All Principal Cities





THE Santa Fe is the luxurious I double-track way to winterless California. In splendid comfort you speed through the Southwest.

The Chief-extra fast, extra fine, extra fare-slips smoothly over half a continent in two business days-Chicago to Los Angeles.

The Santa Fe operates four other fine transcontinental trains daily -the California Limited, Navajo, Scout and Missionary.

Fred Harvey dining-car and station dining-room meals set the standard.

		-
112 211	coupon	N 4
man	COUPON	A A

W. J. Black, Pass, Traf. Mgr. Santa Fe Sys. Lines 1025 Railway Exchange, Chicago, Illinois

Am interested in winter trip to California, Send me free picture-folders and advise cost of excursion ticket.

Address

When writing please mention Nation's Business

The Balance Is With France

FFICIAL statistics compiled by the United States Government with the cooperation of the leading bankers of the country and presented to the Committee on International Settlements of the International Chamber of Commerce show that last year American citizens traveling abroad spent between \$650,000,000 and \$850,000,000 in foreign countries.

By far the largest portion of this amount was spent in Europe, especially in France, which was visited by 245,000 Americans last year. It is calculated by the American banks in Paris that each American tourist spends on an average not less than a thousand dollars in France, which would bring

the total to \$245,000,000.

swelled the total.

The French Government, on the other hand, estimates that the total amount spent in France by foreign tourists in 1926 was equal to \$450,000,000, of which it is believed that at least one-half, or \$225,-000,000, was spent by Americans. This agrees very closely with the estimate of the American banks quoted above, and it may be taken as a most conservative statement that Americans spend not less than \$200,-000,000 a year in France.

The actual amount is in all probability higher. It is certainly not less. Also, as ocean travel is increasing year by year, there is no likelihood that the figures will decrease in the future. The figures for 1927 will probably show an increase over those for 1926, not in paper francs, of course, but in actual gold value, as in addition to the usual tourist crowd some 17,000 veterans and their families attending the convention of the American Legion have

In France's balance of payments the enormous sums brought in yearly by American and other visitors figure on the credit side of her invisible balance. It is just the same thing as if France had exported an equal amount of agricultural produce or of manufactured goods, except that the profit on tourists is far larger than the profit on ordinary exports. The enormous stimulus given to luxury and retail trades, to the hotel business and to the fine arts by foreign, and especially American visitors, is rightly considered by European statesmen as an infinitely more valuable asset than any similar increase in the actual visible export statistics.

But when the amounts Americans spend in France are placed alongside the payments France was to make to the United States under the Berenger-Mellon agreement, the comparison is startling. that agreement, France was to issue to the United States in full payment of her debt bonds of France in the aggregate principal amount of \$4,025,000,000, dated June 15, 1925, and maturing serially on each succeeding 15th of June for sixty-two years in the amounts following:

1932.... \$11,363,500 1926.... \$30,000,000 1933.... 21,477,135 30,000,000 1927..... 32,500,000 1934.... 1928.... 36,691,906 42,058,825 32,500,000 1929 1936.... 52,479,413 1930.... 35,000,000 1937.... 63,004,207 1,350,000 1931....

1938	\$68,634,249	1963	\$62,436,812
1939	74,320,592	1964	64,309,916
1940	80,063,798	1965	66,239,213
1941	51,728,872	1966	58,764,122
1942	57,763,450	1967	60,820,866
1943	58,918,719	1968	62,949,596
1944	60,097,093	1969	65,152,832
1945	61,299,035	1970	67,433,181
1946	62,525,015	1971	69,793,343
1947	63,775,516	1972	72,236,110
1948	65,051,026	1973	74,764,373
1949	66,352,047	1974	77,381,126
1950	67,679,088	1975	80,089,466
1951	55,040,837	1976	82,892,597
1952	56,416,858	1977	85,793,838
1953	57,827,279	1978	88,796,623
1954	59,272,961	1979	91,904,504
1955	60,754,785	1980	95,121,162
1956	62,273,655	1981	98,450,403
1957	63,830,496	1982	101,896,167
1958	65,426,259	1983	105,462,533
1959	55,474,298	1984	109,153,721
1960	57,138,527	1985	112,974,102
1961	58,852,683	1986	116,928,195
1982	60,618,264	1987	113,694,786
~			

So, although Americans now spend more than \$200,000,000 a year in France, the amounts provided in the Berenger-Mellon agreement for the repayment of France's debt to the United States began at \$30,-000,000 for the first two years, rising to \$35,000,000 in 1930, falling back to only \$1,350,000 in 1931 and \$11,363,000 in 1932, to rise gradually to an amount slightly above \$50,000,000 in 1936. That is to say, France's payments were to begin at about one-seventh and at no time within the first ten years were they to amount to more than one-quarter of what Americans now spend in France, although all authorities are agreed that in ten years Americans will double their tourist expenditure.

But, in calculating France's capacity for payment, the fact must not be lost sight of that the payments she was to make to the United States under the Berenger-Mellon agreement were calculated at only a fraction of the amount she herself was to receive from Germany under the Dawes plan. France received on account of reparations, after all costs of the army of occupation and of allied commissions, etc., had

been deducted, a net sum of:

\$75,442,000 for the year ending August 31,

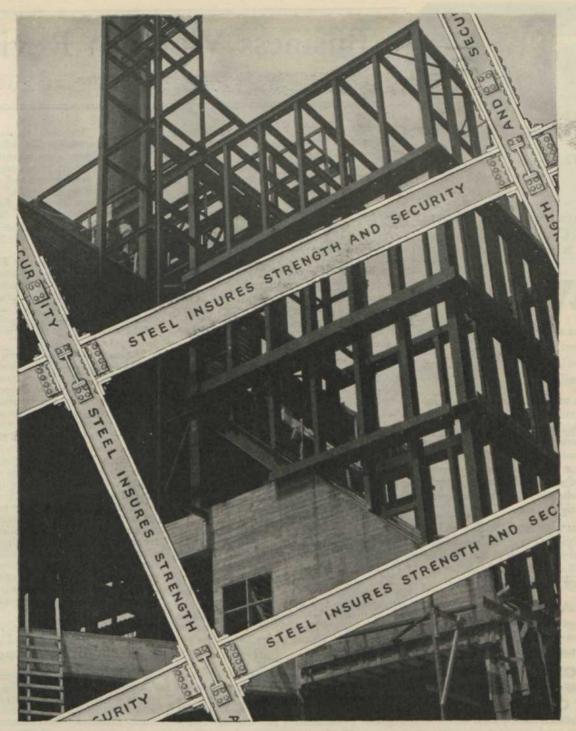
\$103,825,000 for the year ending August 31, 1926.

\$141,500,000 for the year ending August 31, 1927.

France will receive, for the year ending August 31, 1928, a net sum of \$170,000,000 at least, and from 1929 onwards till reparations have been all paid by Germany a yearly sum of \$260,000,000 net, which, with the disappearance of the armies of occupation and other charges, will finally come very close to \$300,000,000 a year.

A simple addition of the amounts spent by Americans in France and of France's receipts from the Dawes plan shows that if the Berenger-Mellon agreement is ratified France will merely be paying the United States one-tenth, gradually rising to onefifth of what she receives from sources which have nothing whatever to do with

her own productive effort.



STEEL STRUCTURES YIELD QUICKEST RETURNS



A STEEL building pays dividends sooner than any other kind of building. It can be erected more quickly. Floors may be laid, curtain walls built, finishing operations conducted on several stories at once.

A steel structure may be altered, extended, remodeled, removed, with astounding speed and minimum expense. And steel is literally fool-proof.

Before you build either a small or large structure a bridge, building or residence—find out how steel can save you money. Investigate the strongest, the safest, of all structural materials. Compare steel with all other building materials before you let your contract.

Send for the illustrated fact-book, "STEEL NEVER FAILS."

AMERICAN INSTITUTE OF STEEL CONSTRUCTION, INC.

The co-operative non-profit service organization of the structural steel industry of the United States and Canada. Correspondence is invited. Address: 285 Madison Avenue, New York City



for the convention of the Western Division, U.S. Chamber of Commerce Feb. 8 and 9, in-

Hawaii

VIEW this as a business trip and count it well worth while to see such an important part of America's Pacific Coast Empire as Hawaii.

View it also as a marvelous pleasure trip for you and your family! A trip to the South Seas — where romance is in the very air and where Nature has created one of her masterpieces of beauty and charm! Bring your plus fours and your tennis clothes—and count on every variety of sport, including horsebackriding, fishing, swimming and surf-riding on surf boards or outrigger canoe.

Make Reservations now for S. S. City of Los Angeles sailing with the convention party from Los Angeles January 28—back in Los Angeles Feb. 17, allowing 8 days in the Islands for the convention, business and sightseeing.

THREE LASSCO LINERS

Provide sailings 3 Saturdays out of 4 direct from Los Angeles to Honolulu -over the Smooth Southern Route!

S. S. CITY OF LOS ANGELES Flagship of the LASSCO Fleet

S. S. CITY OF HONOLULU Newest LASSCO Luxury Liner

S. S. CALAWAII

Most Popular Cabin Liner

One Way Fare, First Class, \$90 up ALL INCLUSIVE TOURS-\$278.50 and up from Los Angeles back to Los Angeles, covering every necessary ship and shore expense, depending on steamship and hotel selected.

SPECIAL TOURS PERSONALLY CONDUCTED by a company representative on each of the monthly sailings of the cruisers de luxe S.S. City of Los Angeles and S. S. City of Honolulu, up to January. Send for special Tour Folder.

Hawaii is a part of the great Pacific Coast empire-come and enjoy it all!

For all information apply any authorized agent, or-

Los Angeles Steamship Co. 730 So. Broadway, Los Angeles

505 Fifth Ave., New York 685 Market St., San Francisco 140 S. Dearborn, Chicago 217 E. Broadway, San Diego

Business Views in Review

By ROBERT L. BARNES

ON SEPTEMBER 7 the Federal Reserve Board at Washington ordered the Federal Reserve Bank of Chicago against the wishes and judgment of its board of directors to reduce its rate of discount from 4 to 3½ per cent. The vote of the Reserve Board was four to three on the matter with the Secretary of the Treasury, who has a vote, away. Since the action of Chicago, the Reserve Banks of Minneapolis, San Francisco and Philadelphia have reduced their rates to 31/2 per cent, making the rate uniform throughout the country. This action has been the occasion of considerable comment.

The nub of the controversy, thinks the Commercial and Financial Chronicle, is a difference as to the soundness of "the theory of easy money and easy credit, to be dealt out by the Federal Reserve Banks with the utmost liberality. When, however, such a policy leads to the rampant and reckless speculation which has so long been witnessed on the Stock Exchange it is obviously time to call a halt."

"The directors of the Chicago Reserve Bank felt that the reduction would not be in the interest of the agricultural and mercantile community which the Chicago institution is supposed to serve and does serve most admirably; on the contrary, it was their belief that the effect would be to draw still more funds away from the Chicago Reserve District to be engulfed in the speculative mael-strom on the Stock Exchange."

One Way to Use Our Gold Reserves

W ALLACES' FARMER on the other hand finds that:

"With our present huge gold reserves in the United States, a mild inflation policy brought on by low rediscount rates and the Federal Reserve investment policy should be a good thing for the bulk of the population not only of the United States but of the entire world."

"Extremely regrettable" is the way Dry Goods Economist characterizes the action of the Federal Reserve Board. Western bankers are quoted to the effect that money rates will have no effect on Europe's purchases of foodstuffs. Commenting on this the magazine says: "Such a view is, perhaps, shortsighted. If Europe is enabled to buy our agricultural products more easily by reason of the 3½ per cent rate, its application affects her purchases of all other American goods equally.

"It is a fair question whether the Federal Reserve Board is not actuated more by a necessity they see for stimulating sales of American factory output abroad than by any other reason. It is a fair question, too, whether the cheapening of money at home is not tending to bring about a considerable amount of inflationary speculation which has elements of danger."

Because Commerce and Finance "earnestly desires the continuance" of the Federal Reserve System it protests against the action of the Board, as a dangerous step toward the centralization of banking. An editorial states that many consider the Federal Reserve policy has fostered speculation and "that the recent reduction was more in the interest of Europe than of the United States.

"As there is a considerable body of financial opinion in this country that professes to believe in 'American capital for America' and a still larger body of politicians who will be eager to seize upon an anti-foreign slogan, it will be easy to popularize the issue that has already been joined and no one can say just what will be the result."

"More Power Than Any King" is the title of an article by Frank I. Mann in *Prairie Farmer* in which he advocates several rather drastic changes in the whole Federal Reserve

System. He writes:

"Instead of giving the Federal Reserve Board power to change arbitrarily the rate of rediscount, authorize a commission to ascertain regularly the index price of all com-modities, properly weighted, and provide that the rediscount rate be raised or lowered as might be necessary to maintain a constant index price.

"As new industries should be developed, as has been been done of recent years, they would be factors in ascertaining the index price, and funds would be provided for the exchange of such new commodities, without having to be withdrawn from the exchange of the other commodities, which has always been a disturbing factor in general business. Each commodity would vary somewhat in price according to the supply and demand of such commodity, but no one commodity would vary enough materially to affect the general index price.

"In this way the exchange value of the dollar could be stabilized; confidence could be asserted in business transactions; future maturing obligations could be paid with money of the same exchange value as when obligations were made, if made after its adoption; uncertainties and risks of legitimate speculation reduced to a minimum, and a new era would dawn for the commercial world."

Retail Census of National Chamber Proving Valuable

AT FIRST glance there seemed to be some inaccuracies in the figures in the retail census of Baltimore conducted by the Do-mestic Distribution Department of the National Chamber. In commenting on these seeming inaccuracies the Department pointed them out as "unexpected outlets" for various classes of goods and as being "indicative either of strange aberrations in the distribution of merchandise, or, perhaps, of interesting beginnings." In commenting on this fact the

Retail Ledger writes:

"Among these 'interesting beginnings' reported in Baltimore are no fewer than eleven grocery and delicatessen stores which sell books; the handling of men's clothing by nine furniture stores and an equal number of groceries; an electrical supply store that sells \$24,000 worth of drugs; two drug stores and two men's clothing stores that sell furniture; jewelry, watches and clocks sold through meat and grocery stores; \$7,500 worth of millinery sold by one dairy and poultry products store; woolen piece goods sold in a store devoted principally to ice cream and soft drinks; fiftyeight grocery and delicatessen stores that sell women's hosiery; women's underwear handled by six furniture stores, and a number of other incongruous combinations of various kinds.

"The so-called drug store has long been

LITTLE DRAMAS IN THE LIFE OF A GREAT NEWSPAPER SYSTEM



How the fascinating adventuress outwitted the level-headed bankers

A tiny item in the day's court news caught the eye of a SCRIPPS-HOWARD editor. An unknown Cleveland woman was being sued for \$300,000 on an overdue note.

"Probably an unromantic business difficulty," mused the editor. "And yet...a woman who can borrow \$300,000 must be interesting."

Urged by his curiosity, he sought out the sumptuous borrower. Indictments followed, and every day for the weeks that followed, SCRIPPS-HOWARD Newspapers amazed their readers with a continuous story of the daring chicanery of a female Wallingford.

For "Cashing Cassie" Chadwick practised her wiles not on gullible widows and impressionable speculators, but on cautious, unemotional bankers and business men. Posing as the natural daughter of one of America's richest men, she borrowed huge sums of money from the strictest financial institutions, often giving as collateral bulky bundles of supposed securities, which were afterwards found to be bundles of old newspapers!

In exposing the colorful Cassie and bringing her to justice, The SCRIPPS-HOWARD Newspapers not only achieved one of the most daring scoops in newspaper history, but performed a signal public service by ending the career of one of the most dangerous, and, at the same time most interesting characters, in the history of crime.

NEW YORK . Telegram SAN FRANCISCO . News DENVER . Rocky Mts. News DENVER . Evening Network BALTIMORE . . Past CINCINNATI . . Past TOLEDO . . . News-Bee PITTSBURGH . Press INDIANAPOLIS . Times COLUMBUS . . Clitzen COVINGTON . . . Kentucky Past — Kentucky Edition of Cincinnati Past

SCRIPPS-HOWARD

MEMBERS AUDIT BUREAU OF CIRCULATIONS



AKRON., Time-Press YOUNGSTOWN Telegram KNOXVILLE News-Sentinel
BIRMINGHAM. Past FORT WORTH... Press EL PASO...... Past
MEMPHIS Press-Scimitar OKLAHOMA CITY News SAN DIEGO..... Sun
HOUSTON.... Press EVANSVILLE... Press TERRE HAUTE... Past
ALBUQUERQUE.... New Mexica State Tribune

NEWSPAPERS

AND MEMBERS OF THE UNITED PRESS

ALLIED NEWSPAPERS, INC., National Representatives
250 PARK AVENUE, NEW YORK · CHICAGO · SEATTLE · SAN FRANCISCO
PORTLAND · DETROIT · LOS ANGELES · ATLANTA

TERRA COTTA

for

Beautiful Night Effects



Pacific Telegraph & Telephone Building San Francisco, California, Miller, Pflueger & Cantin, Associate Architects

ENTIRELY in Terra Cotta from sidewalk to roof the appearance of this building at night is magnificent and inspiring. The unusual effectiveness of the illumination is due to the beautiful color and wonderful light reflecting properties of the Terra Cotta with which it is faced. Write for our booklet on "Building Floodlighting and Its Possibilities With Terra Cotta."

NATIONAL TERRA COTTA SOCIETY 19 West 44th Street New York, N. Y.

(On behalf of the Terra Cotta Industry in the U.S.)

looked upon as a miniature department store and, as such, has been the butt of many jokes because of the large number of separate, unrelated lines carried. Examination of the figures showing the classes of commodities sold in Baltimore stores shows, however, that the drug store must yield precedence on this score to many others, for, where thirty-five lines are being sold through the drug outlets, fifty of them appear in the grocery list, with an equal number in the dry goods and notions division.

"Even such supposedly single-line stores as those devoted primarily to furniture and house furnishings, candy and confectionery, and soft drinks and ice cream top the drug stores in diversity of merchandise carried, these handling forty-six, forty-eight and thirty-eight lines, respectively, as against the thirty-five in drug stores. Department stores, of course, top the list with sixty-two lines.

"It is becoming increasingly apparent that the day of specialization in retailing is fast waning, for there is now hardly any type of store that will not take on an unrelated sideline, provided only that it is profitable and fast moving.

"Regardless of whether these movements are regarded as 'strange aberrations' or 'interesting beginnings,' their effects are noticeable throughout the retail world."

Facts to Replace Guesses

THE MAGAZINE ADVERTISER finds the retail census "immensely valuable." Its particular interest to that magazine lies in the fact that when extended to cover more of the country, it may indicate an answer as to whether to sell advertised or unadvertised goods.

"This is an old question that many have speculated about and innumerable heated arguments have resulted over it, but so far no detailed study has been made of sufficient magnitude to supply a definite answer. Figures which this report makes available are interesting in their bearing on this subject.

"For example, automobiles which are highly advertised have an average sales cost to the Baltimore retailer of 9.33 per cent, while auto accessories almost as highly advertised, require 11.05 per cent.

"Perhaps other examples will be more to the point. Men's wear is much better advertised by manufacturers than women's wear; their respective selling costs are 10.57 per cent to 15.02 per cent. It costs custom tailors 15.86 per cent to sell their services, which is more than stores expend on either men's or women's wear. These are from the shopping lines of merchandise.

"Similar figures for the whole United States would give a very conclusive schedule of sales costs in all departments of merchandise, Even from the cities already surveyed they will be convincing when collected and digested.

"Dozens of other marketing problems which have long awaited positive answers will find them in these surveys."

The problem of finding a place to park an automobile may have something to do with the complaint of advertising managers that their dollar doesn't purchase as much reader interest and volume return as it did a few years ago, according to the Retail Ledger. An editorial states:

"The influence of the chains is generally credited with the spread of outlying branch stores and the growth of the 'association idea' in retailing which is becoming more and more apparent every day. But traffic congestion and consequent parking difficulties are also playing a big rôle here, which means that centrally located stores will have an increasingly difficult advertising problem to solve unless telephone and mail-order sales-

ADAPTATIONS

Powers equipment is in general use wherever such work as this is dones

as this is dones
General Accounting—Payroll
and Labor Distribution—Material and Stores Record—
Sales and Profits Analysis—
Insurance Accounting and
Statistics—Public Utilities Accounting—Census and other
Vital Statistics—Traffic and
Transportation—Accounting
—Chain Store Sales and Inventories—Federal, State and
Municipal Accounting

Another angle of the same problem is pre-sented in the Dry Goods Economist which suggests branch stores in outlying districts as the solution of the retailing problem connected with inadequate parking space in congested districts, or those in which "No Parking" ordinances have been put into effect to facilitate traffic movement.

The Automobile Industry Seeks New Sales Appeal

STYLE appeal has been used for several years as an argument for buying a car according to Automobile Topics. But what argument will be advanced when style appeal becomes outworn?

'Just previously there was the struggle to introduce balloon tires and four-wheel brakes and the inevitable controversy attendant upon any major change in structure of the product of any large industry. Before that there were the days of the V-type engine, the self-starter, the battle between the fours and sixes, with the 'double-opposed' motors still chugging merrily away. But what is next?

"A veteran of the industry and an en-

gineer of standing was asked just that question the other day. 'What will be the next significant and sweeping innovation to make people really anxious to discard their old automobiles and buy new ones?'

"'That requires a very great effort of the imagination,' he replied. He went on to speak of superchargers, transmissions and some other things, but he spoke inconclusively. He admitted he had been giving the matter thought, but it had returned him nothing.'

Should We Sell to People What They Don't Want?

ENTERPRISING promoters in New York are offering to place manufacturers and others in touch with those who have been left cash in amounts from \$25,000 to millions of dollars. Daily reports of the beneficiaries of wills are sent out, according to Jessie Rainsford Sprague writing in the November issue of Harper's on "Putting Business Before Life." From this and other striking examples of selling ingenuity, and the pressure put on salesmen to "produce," he concludes.

"Life was, it must be admitted, a bit more

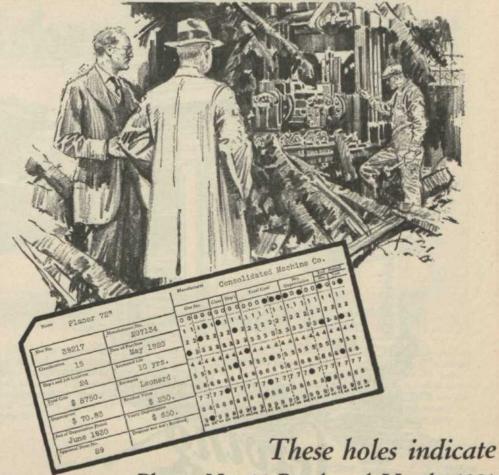
dignified in the days when salesmanship was less glorified. The impression will not down that the selling of merchandise is accomplished at too high a cost when it is necessary to frighten or shame employes, to enlist the aid of the church, or to employ the stimulus of flattery on a country-wide scale. Let us see if these things are good for business."

In discussing this question with a New York banker Mr. Sprague asked if the bank in scanning a corporation's statement with a view to making a loan took any account of the corporation's methods of securing busi-

ness. The banker answered:

"We go further than merely withholding credit. I might mention the name of a very prominent corporation from which this bank has recently declined to accept an account. Yet, the corporation's financial position is at present absolutely sound. . . But here is the fly in the ointment; the corporation has built its business on extreme high-pressure salesmanship. It has forced its salesmen to make public nuisances of themselves. I think I am not unduly critical when I say the corporation has lowered the tone of Ameri-

manship are developed to considerably WHEN POWERS CONTROLS YOUR PLANT INVESTMENT greater degrees than in the past."



Planer No. 14 Purchased March, 1921 Cost \$8750. Depreciated value today \$4950

and the basis for your claim is positive.

Powers cards are punched from vendors' invoices or from construction orders. They are basic property records that produce, with Powers Mechanical Equipment, the complete history of every item of plant and equipment.

But data collected for insurance and taxes is only the start of their usefulness.

By rearranging the cards mechanically, they produce records supporting property and general ledgers, depreciation reserve, and monthly departmental depreciation. These records are made by item, class, location, department, repairs and maintenance. Duplication of equipment is avoided and property investment is kept at a minimum.

But remember, insurance can only be collected from a positive and proven claim.

Send for a free Powers bulletin today that tells you the whole story.

POWERS ACCOUNTING MACHINE CORPORATION Division of Remington-Rand, Incorporated 374 Broadway, New York City

ACCOUNTING MACHINES

"Some day the corporation will pay for POWERS PRINTS NAMES AND WORDS AS WELL AS FIGURES



Correct design for every application, strength and extreme accuracy of construction distinguish all French & Hecht Wheels.

There can be no other Steel Wheels like French & Hecht because many of the essential features of construction are exclusively French & Hecht.

THIS institution enjoys the reputation of making steel wheels so surpassingly well that America's leading industries have beaten a path to their door.

For over a generation French & Hecht have specialized in the research and study of wheel application and engineering and have developed more steel wheels than any other organization in America for Farm Implements, Industrial Tractors, Road Machinery, Trucks, Trailers and other equipment.

The vast experience and facilities of this organization enable it to solve any wheel problem — producing a wheel that is mechanically correct for every purpose and every machine—at a lower cost than is possible in the factory producing the machine itself. Any information concerning wheels will be gladly supplied. Write.

FRENCH & HECHT

Wheel Builders Since 1888

DAVENPORT, IOWA

SPRINGFIELD, OHIO

FRENCH & HECHT

these things. Already it has a healthy competitor that is doing business along lines of reasonable conservatism and making fair progress. The older organization is in no position to meet competition. It has no organization worthy of the name. Secretly the people who have done its high-powered work resent the things they have been compelled to do. If events ever begin to turn against it, the corporation's decline will be sensational.

"These are the reasons why this bank declined the corporation's proffered account. If we accept its business now when it is prosperous we can hardly refuse to come to its aid in case of adversity. We have thought best to stay out of the corporation's affairs altogether."

Admittedly, supersalesmanship makes for a shabby sort of civilization. In the last analysis, moreover, it is not even good for business.

Industry Finds Federal Trade Commission Useful

ONE AFTER another industrial trade is using the trade practice conference initiated by the Federal Trade Commission for the elimination of trade abuses, according to the International Confectioner, in commenting on the candy industry's refusal to participate in one. An editorial says:

"The moving picture industry and the jew-

"The moving picture industry and the jewelry trades are the latest to seek conferences at Washington to iron out their difficulties in the adoption of rules that all will be compelled to abide by. We are still of the opinion that the confectionery industry is rejecting a timely opportunity in refusing to adopt trade practice submittal.

"In the case of the moving picture industry 80 per cent of the producers and 60 per cent of the distributors have shown a willingness to attend a conference and be guided by its decisions. This means some 20,000 persons. Some practical plan for a representative from each group in the trade to attend is being sought. Our industry is still in doubt what is fair and unfair.

"The Commission has just announced rules and interpretations under which the baby carriages and woven furniture may be controlled in certain respects in selling. In time, we believe, our industry, like others, will have to come to it. It will probably be in a roundabout way, but they'll get there, just the same, perhaps with the Government's gentle compulsion by way of some sort of regulation."

Government's High Regard of Railroad Achievements

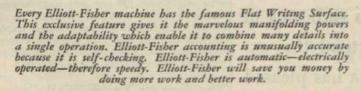
THE REMARKABLE achievements of the railroads in increasing efficiency have been told, but will bear repeating, thinks *The Bache Review* in commenting on this performance as recorded in the United States Department of Commerce Year Book for

"During 1926 the concerted effort to handle traffic without delays continued and all requirements for cars were met without car shortages. There was an average daily surplus of never less than 134,000 cars in any quarter, while the percentage of unserviceable equipment was lower than in the three preceding years.

"This government report mentions one of the goals which railroad executives set up for themselves in the early period of their campaign to better the service. It was to reduce unserviceable freight cars to 5 per cent and unserviceable locomotives to 15 per cent. For years these unserviceable factors pre-

Elliott-Fisher | Sundstrand







Adding-Figuring Machines

Every Sundstrand machine has a ten-key keyboard. One hand controls all operations. And you no longer need be satisfied with a machine which simply adds. Sundstrand does direct subtraction by merely touching a key. Touch another key and you are ready for automatic shift multiplication. No faster machine is made. All operations are visible, insuring accuracy. Sundstrand machines are saving money for thousands of companies now. They will do the same for you.

Bigger Profits

Daily figures make them possible

TOW-each day with the morning mail—you can have a complete report of all operations in your business, including the preceding day!

Thousands of executives have proved that the closer control provided by such daily information is the straightest road to bigger profits.

With Elliott-Fisher and Sundstrand equipment, such daily data are easily obtainable. You can know the exact status of accounts payable and receivable, orders received, sales billed, shipments, collections, bank balances—every vital statistic—every

day. You can compare them, item by item, with records of yesterday—a

year ago—any period. You can steer your business by facts instead of guesses.

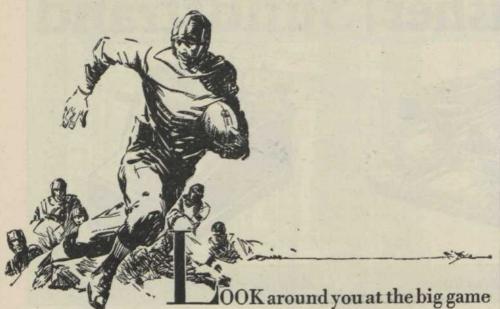
And — most remarkable — Elliott-Fisher and Sundstrand will not increase your accounting costs. The reverse is true. Costs actually go down. Work is done faster and more accurately. A smaller personnel is needed. Money saved as well as profits gained!

Just how Elliott-Fisher and Sundstrand will fit into your business—large or small—can be told in a very few words. Write us for more information.

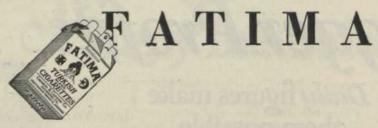
General Office Equipment Corporation

342 MADISON AVENUE ~ NEW YORK CITY

WATCH THE YOUNGER CROWD PICK THE WINNERS!



-and see the Fatima packages pop out! No gathering of the younger set, large or small, fails to extend this extraordinary record. Unquestionably, Fatima has pleased more smokers for more years than any other cigarette.



The most skillful blend in cigarette history

LIGGETT'S MYERS TOBACCO CO.

The Country's Biggest Fleet Owners Gave Us This Information

SURVEY among the 5,321 biggest manufacturing organizations in the country has given Nation's Business the first real information ever compiled on motor-car and truck-fleet purchases and on tire and accessory purchases by fleet owners. Some of the questions asked and answered are:

How long, in terms of mileage, have you found it profitable to operate cars and trucks before replacing?

What is the approximate cost per mile of operation, including depreciation? (In many cases operation charts were submitted in answer to this question.)

Are passenger cars purchased by the company or individuals?

How are operating expense and upkeep handled?

If passenger cars are purchased by the company, does the individual who will operate the car have any voice in the selection of make?

Do you purchase tires for your fleets direct from the manufacturer or through dealers?

Who determines the kind of tires used?

This information will be useful to motor car and truck manufacturers, to tire and accessory manufacturers and distributors, to oil refiners and sales companies, to insurance companies, to financial organizations—and to all advertising agents.

Details of this survey have been put in condensed form by an impartial research bureau and are now available for agencies and advertisers. Clip this advertisement and send it to Guy Scrivner, Director of Advertising of NATION'S BUSINESS, 850 Graybar Building, New York City.

vailed in much higher percentages. During 1925 the carriers had succeeded in reducing the average unserviceable freight cars to 7.7 per cent and the locomotives to 17.18 per cent. In 1926 they had gone further and arrived close to the minimum. In that year the record was: unserviceable freight cars 6.5 per cent and locomotives 16.6 per cent. The

report says:

"'Railway operating efficiency, resulting in rapid and reliable delivery of freight, has been an important factor in the reduction of inventories and the speeding up of business generally. Where two or three weeks were required for delivery of merchandise just after the war, reliable delivery is made today upon a week to ten-day schedule."

Railway Age calls attention to the fact that while freight rates have advanced only 14 per cent in 37 years, commodity prices have advanced 79 per cent and farm prices 96 per cent. If freight rates had advanced proportionately with commodity prices the nation's freight bill would now be \$2,700,000,-000 more than it is:

"The investment in the railways is now about 180 per cent greater than in 1890 and their net capitalization about 140 per cent greater. Their freight business is about 500 per cent greater, but they are handling it with only about 125 per cent more locomotives and 165 per cent more freight cars. Of course, each freight car has a much greater carrying capacity and each locomotive much more power, and the average load carried per train has increased from 175 to 770 tons.'

The French Tariff Wall and Commercial Treaties

THE REVISED French tariff duties that went into effect September 6 and which operated to raise duties to an almost prohibi-tive figure on a large list of American products, is only a part of a general revised tariff which is still in the course of preparation and must run the gauntlet of debate in Parliament according to The Commercial and Financial Chronicle.

America's position for the negotiation of a commercial treaty is not advantageous. It has been well known in political and business circles, the Chronicle points out, that France's treaty with Germany was in the course of negotiation for about two years; and, that its main end was to secure reciprocal favored-nation privileges. In the absence of any treaty between the United States and France to secure similar advantages it was obvious that granting special privileges to Germany would involve "ipso facto the imposition of discriminating duties on American products." Yet it was not until June 19 last that a tentative draft of a proposed treaty was sent to Paris. This did not apparently meet with much favor and "France, in other words, has apparently made it clear that it is indisposed to conclude a treaty with the United States except upon a basis of reciprocity."
"On that point the United States again

finds itself at a disadvantage. The Ford-ney-McCumber tariff, with its egregiously high duties, does not provide for reciprocal concessions. The only 'most favored nation treatment' that it recognizes is that under which a foreign country accepts the American tariff as it stands, but grants to the United States as favorable treatment under its own tariff as it accords to any other country.

"The protection which the present tariff assumes to be so good a thing for the United States becomes, moreover, if applied by other countries to the protection of their own industries against the United States, a gross discrimination which the President may penalize by raising duties 50 per cent or even by

prohibiting importations altogether. The only authority that can grant concessions is Congress and it is unlikely that Congress will embark upon the stormy sea of tariff revision on the eve of a presidential election.

"In other words, the quid pro quo which France has intimated its intention to ask is precisely of a kind which the United States, committed to its policy of high protection, is both unwilling and unable to grant."

Dry Goods Economist, in discussing this question, also points out that "we cannot revise our own tariff rates in favor of France because, first, Congress must make or approve such revisions, and with a presidential year coming on the dominant political party is hardly likely to allow the tariff question to arise; second, under the 'most favored narule any concession granted to France would apply equally to other nations accorded most favored nation treatment.'

"There is, too, the possibility that concessions might be made in the debt settlement dilemma. Here again we are up against the cold fact that any change in the basis already arrived at would precipitate political disputes desired by nobody in this country except that comparatively small group which desires to see us forgive France her debts. Furthermore, the total value of the American exports affected is only \$10,000,000, a small amount compared to our total exports. It is worth making a fuss about because any attack on even a fraction of our foreign trade is an attack on the whole; but it is doubtful if for the sum involved any American Govern-ment of whatever party would feel justified in modifying a debt settlement that runs into billions. Probably the question will be set-tled by adjustments in commercial rights and privileges which involve neither tariff changes nor debt modification."

What Follows When Science Turns Mercury into Gold

I F DR. WENDT'S remarks in this issue about the imminence of the discovery of the philosopher's stone are true, then this editorial from Export Trade and Finance may not be as amusing as its author meant it to Various proposals have been made to substitute other things for money, as we know it. Perhaps his jesting has merit. Anyway, we offer it to our readers to appraise as it suits them.

"Twenty ounces of tripe are by law ex-changeable for one ounce of gold!

"'It shall be lawful for any person or persons to bring to the said mint corn and wheat batter in order to their being coined: and that the batter so brought shall be there assayed and coined as speedily as may be after the receipt thereof, and that free of expense to the person or persons by whom the same shall have been brought. And as soon as the said batter shall have been coined, the person or persons by whom the same shall have been delivered, shall upon demand receive in lieu thereof griddle-cakes of the same species of batter which shall have been so delivered, weight for weight, of the pure corn or wheat therein contained.

"Well, why not?

"If, in the final analysis, there is any sound principle behind the desire for the fixation of prices for farm produce it is reducible to this. Maybe the manner of accomplishing the result will be different. But we rather fancy the particular piece of legislation pre-sented above, which we submit to Congress, with our compliments, for consideration during the next session.

But whose will be the image and super-

scription to be impressed on the griddle-cake coinage?"



hen a business outgrows its office

FILING cabinets jammed tight with correspondence. Letters with no place to go; letters hiding in the files. Ugly stacks of papers, pamphlets, catalogues, piled high in confusion on desks and

A common enough situation-when a business tries to function with outgrown office equipment.

Added floor space is expensive-and

not always available. How then can a fast-growing business operate efficiently without an increase in floor space?

Globe-Wernicke Service offers a thoroughly satisfactory solution of this and all other problems in office equipment. Efficient office equipment, as developed in this new Service, combines three essentials: 1, the right kind ness; 2, its convenient, space-conserving arrangement; and 3, a knowledge of how to use it efficiently and economically. Globe-Wernicke Service brings direct to

of equipment for your particular busi-

you all that is new and practical in office layout and equipment, Facts, figures and plans-derived from exhaustive research in actual office conditions - are now ready to be conveyed to you by specially

trained consultants in office equipment, wholly without obligation on your part.

Phone, write, or call on your nearest Globe-Wernicke Dealer-today! He will gladly send you his consultant in office equipment, at your convenience. Or, if you prefer, just sign and mail us the coupon at the bottom of this page.

GLOBE - WERNICKE EQUIPMENT

includes

Steel Filing Cabinets Steel Shelving Steel Safes and Storage Cabinets Sectional Bookcases Safeguard Filing System Visible Record Service Miscellaneous Equipment

Descriptive literature on any of these items sent free on request. Use the coupon below.

(21	1	9	7	. 1	
91	lob	e-V	Veri	nie	ke

OFFICE EQUIPMENT SERVICE



T [Equipment Last acove),
N	ome
A	idress

job too great for Gas!



TWENTY tons of white hot steel are being rolled out of this huge GAS FURNACE on a steel flat car, which forms the hearth.

The large pieces of steel on the car are locomotive axles which have been through an annealing pro-cess in this gas-fired furnace, an operation that precludes all likeli-hood of axles breaking.

Industrial gas maintains in this furnace a temperature of 1600 degrees Fahrenheit.

Gas is the most "Flexible" of all fuels. It can be used in a jeweler's tiny torch, or for huge operations, such as pictured above. It is also "Flexible" in the sense that its volume and intensity can be raised or lowered, instantly, at the turn of a valve. It gives a con-centrated heat wherever needed without involving bulk, waste energy or waste material.

Gas is obviously the Industrial Fuel of the day. Write to your gas company for facts concerning the use of gas in YOUR industry, or to

American Gas Association 420 Lexington Avenue, New York City



You Can Do It Better with GAS



News of Organized Business

BUSINESS has been quick to take the advantages of

group action but has been slow

to assume group responsibilities.

Too frequently business men

have acquiesced, even if they did

not participate in objectionable

practices until an outraged soci-

ety compelled amateurs to inter-

fere." The amateurs referred to

are the legislators who some-

times make law to curb iniqui-

tous practices which is worse in

effect than the practice.-Owen

BUSINESS men are devoting much energy these days to making the public want to buy their goods, according to R. M. Hudson, chief of the Division of Simplified Practice of the Department of Commerce. Mr. Hudson continues:

For the consumer who translates this desire into action through purchasing the goods, the path to possession is made smoother by the deferred payment plan. Some sellers may feel this is about as far as they can go toward making it easier for the public to buy their wares.

On the other hand, as more of our business men study the primary forces producing continuous purchasing power, we may expect to see more attention given to making the public better able to buy. In other words, in this constant struggle for a larger portion of the consumer's dollar, consideration must be given not only to the dollar he now has in hand, but also to those likely to come into his hands after this one is gone. Where are the future "consumer dollars" com-

ing from? How many of them will there

D. Young.

be per consumer?

Certainly not all of the effort should center on getting more of the consumer's present income away from him. Some of the effort might well be directed toward strengthening, or even increasing, the consumer's income as a guarantee of the constancy of his purchasing power. Continuous buying is the result of continuous power to buy, and that power has to be regenerated or replenished as it is used.

Firms making consistent effort to eliminate waste through simplification and standardization, to improve both products and processes—thus to give better value for the same or for less money—are strengthening the consumer's power to buy. Likewise companies endeavoring to stabilize employment in their plants, to provide steady jobs at good wages for their workers, are reinforcing the buying power of their own employes as part of the great

consuming public.

It is not difficult to imagine the relative increase in consumption in many classes of goods if the present purchasing power of the average consumer were increased 10 per cent, nor is it hard to visualize the new wants and therefore the new opportunities for production that would spring up under such conditions. Increasing the power to buy means larger sales of goods to satisfy present wants, also a larger variety of wants than now prevails. Elimination of waste in industry creates greater purchasing power.

Grocery Conference Proves Successful

THE OBVIOUS benefits derived from an THE OBVIOUS benefits derived from an experiment in applying the group conference idea for the betterment of retailing prompted Harold P. Reaume, secretary of the Junction City, Kansas, Chamber of Commerce, to summarize his experience with the Grocery Training Program.

The National Association of Retail Gro-

cers, with the assistance of the Federal Board for Vocational Education, has developed a program of conferences and study for local grocers. William E. Koch, director of the Bureau of Business Training of the grocers' association, was secured to start the Junction City conference. Fifteen grocers enrolled for the course, which consists of twenty-three topics, each dealing with some fundamental

requirements for successful retailing in the grocery business.

There is nothing that savors of the classroom in the course. There is no textbook, no lecture, no teacher, no recitation. The procedure is based squarely and solely upon the experience of the group members. The material furnished by the national association provides suitable questions and cases which are discussed by the group.

So satisfactory were the results of the first conference that many of the grocers decided to go through the course a second time

in the light of the new ideas that it had revealed to them. It was also decided to organize a special course for store employes.

Mr. Reaume summarized the benefits as: (1) better understanding of each other and common problems on the part of the members of the course, (2) a clearer vision of the food distributing industry, (3) increased ability in analyzing their problems, (4) the course prepared the grocers for further study of the advanced courses offered by the National Association.

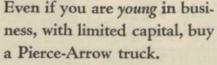
Arbitration

THE National Furniture Warehousemen's Association at a meeting last summer adopted a plan of arbitration. tions that will come before this national board will be disputes from affiliated associations, competitive issues involving ethics or questions of general policy and disputed transactions between members; all matters involving violations or misunderstandings of the Code of Ethics, Rules of Practice, Correspondent Shipping Rules or other associa-tion rules and practices. Besides this na-tional plan, a set of rules was worked out for local organizations. According to Henry Reimers, secretary of the association, "after we have our internal plan of arbitration in good working order we contemplate the arbitration of disputes between members and their customers.'

No More Shabby Shoes

STATISTICS show that formerly men wore more shoes than women, but that now women are wearing more than men. During the forty-one-year period from 1879 to 1919 men wore an average of 2.64 pairs of shoes per year as against 2.44 pairs annually for women. During the seven-year period from 1919 to 1925, however, women

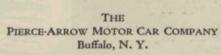
... you can't "bargain" with haulage cost



It will save money for you in maintenance cost. It will haul for you at lowest cost per ton mile. It will save you big money on depreciation. It will give you standing with your customers.

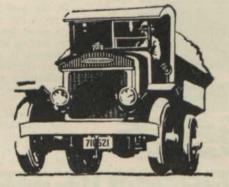
If you wish, you may purchase on our Finance Plan. A small amount down—balance in conservative amounts over a period of months.

Pierce-Arrow trucks are priced at \$3500 and up for chassis, f. o. b. Buffalo, N. Y. . . . Sizes: 2, 3, 4, 5 and 7½ tons. Six-cylinder Motor Bus prices upon application. Terms if desired.



Let your Pierce · Arrow distributor appraise your used truck

He can handle it to your best advantage by reason of his long experience and ample facilities.



Pierce-Arrow

Dual-Valve .- Dual-Ignition .- Worm Gear Drive

MOTOR TRUCKS

ARIZONA

Phoenix

+++ the new winter playground

Go West Now!- It's Springtime!

HERE'S A REAL
WESTERN VACATION
"Dude Ranches"...
"Hunting.... Outdoor
Sports all winter!!

When leaves are falling in the woods of Maine and snowflakes drift over Lake Michigan, it will be springtime in Phoenix, Arizona. Green lawns and all outdoors call you to golf, tennis and picnics—with sunshine all day.

The West you've wanted to see! Mountains, big game, fishing, Roosevelt Dam, prehistoric Indian dwellings, famous Apache Trail, cattle punching—a vacation of a thousand varieties, all within an hour or so from Phoenix, a metropolis of 55,000 people.

Winter rates on Santa Fe or Southern Pacific. Stopovers on all tickets.

Tune in on Station KFAD,
Phoenix, 273 meters. Tuesdays, 10:00 P.M.,
Eastern Time



INVESTMENTS IN CANADA

We are equipped to make audits and prepare accurate and exhaustive reports for Companies, Firms, and individuals proposing to invest in Canadian enterprises or to extend their activities to this country.

WELCH, CAMPBELL & LAWLESS

Chartered Accountants Cost and Production Data

CROWN LIFE BLDG.

TORONTO CAN.

have worn an average of 2.5 pairs annually while men have only worn 2.19 pairs annually.

The National Shoe Retailers' Association wants to increase the number of shoes men wear. To do this they are inaugurating a four-year advertising campaign coupled with an intensive effort on the part of shoe retailers to increase the sale of men's shoes. One million dollars a year will be spent in an effort to end carelessness and indifference in the matter of footwear. This advertising, however, will not take the place of brand advertising but will tend to make it more effective.

Actual advertising will start in January, 1928. The chief aim is to impress upon men that, from the standpoint of appearance and comfort, shoes are the most important part of their wardrobe, rather than unnecessary complement to it.

Employe Representation

ALTHOUGH employe representation was virtually unknown before the World War, in 1926 there were 1,369,078 workers in the United States under employe representation, operating under more than 900 Works Councils in about 432 separate companies. These facts are brought out in a pamphlet entitled "Employe Representation or Works Councils" and issued by the Department of Manufacture of the National Chamber. The publication also briefly reviews the growth of the movement, various types of works councils, results of the experiences of concerns which have established them and the difficulties encountered.

The relations of management with those who guide machinery and production is of



greater importance than the equipment itself and it has been the awakening of the employer and employe to this which has brought about the results now mutually enjoyed, says Mr. E. W. McCullough, manager of the Chamber's Department of Manufacture, in the foreword to the publication

Mass production today and tomorrow makes it more difficult, the report continues, for the officers in industry to maintain the man-to-man-relations with the workers that prevailed in the small industries in the past. They are separated from each other by numerous foremen, sub-foremen, supervisors with various titles and powers—what appears to the workers as a veritable network of authority which they do not understand, but which has been occasioned by more complicated modern business structure.

Today the mutual interest of management and of employe in the success of their industry is becoming better recognized. The thoughtless and uninformed believe that dividends are inherently marshalled against wages.

They overlook the ability of united and cooperative effort between management and employe to effect practices and economies which lead directly to better wages and dividends.

Industry has needed and has searched for some method, some way, some means of bringing these gaps in human relationships in modern and expanding business. Various plans and movements have been proposed and instituted towards this end. Employe representation is just one of the devices which has been introduced, with the purpose of overcoming the lack of personal touch, misunderstandings, and the attendant results, between management and men.

The Value of Systems

LEW HAHN, managing director of the National Retail Dry Goods Association, has this to say of the place of systems in retailing:

Probably most of us recognize that business—and especially the business of retail distribution—is becoming an extremely complicated thing

complicated thing.

Without the slightest desire to depreciate the great value of systems and statistics which have been the fruit of scientific study of the problems of retail distribution, we must own that sometimes we wonder whether we may not be making some things unnecessarily difficult and complex.

Also we wonder whether there may not be a danger of losing the noble virtue of simple and straight thinking.

Is there not a danger that we are tending to make our business too esoteric, too hard to understand and too cumbersome in execution?

Retailing is, first of all, a commonsense matter of buying and selling wanted commodities.

In the past it was conducted on nothing much but common sense.

As retail businesses have grown in volume, serving always increasing numbers of consumers, it, of course, became necessary for the merchant to set up always larger organizations and to encourage specialization upon the various phases of the business.

That was as it must be.

The constant enlargement of organizations naturally enough required that systems must be set up to enable management to keep more or less control over a great many more employes who, perforce, must work more and more alone and apart from the source of the store's policies and inspirations to service.

Today the retail business is no longer a simple thing.

It must be studied in all its phases. Systems—as the attenuated arm of management—must be improved so that more and more they may encourage if not compel greater individual effectiveness among

With all this we are in agreement, and yet we wonder if our very need of specialization may not be calling into our field the type of mind which loves the complex and

employes.

plicity.

We raise no question concerning the wisdom of building efficient organizations

of specialists.

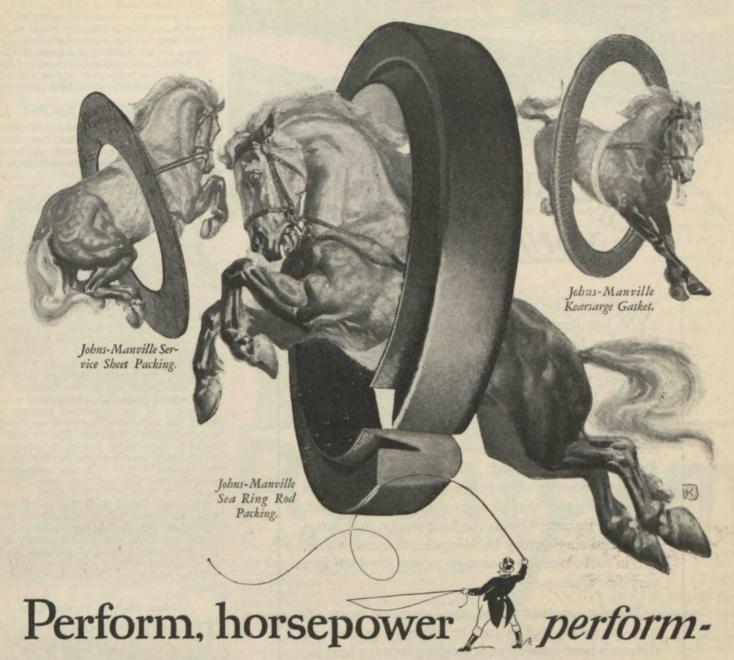
Nor do we question the advantages of getting away from the one-man type of

does not understand the beauty of sim-

We bend our head in profound respect and admiration for the splendid progress that has been made by the specialists in the department store field.

We accept as a distinct and great contribution the charts and the methods of the engineering profession.

And yet we have the temerity to ask: With all these new methods are we not sometimes prone to forget that, after all,



Queer looking hoops, aren't they? Yet they are directly responsible for the fine performance of horsepower in many an industrial plant. They are Johns-Manville Packings.

As the washer in your kitchen faucet prevents water leakage, so do these packings prevent steam leakage in power plants . . . and save horsepower.

They are only a few of the highly efficient group of packings, insula-

Asbestos

tions and refractories, based on Johns-Manville Asbestos and allied materials.

These products and the Johns-Manville men who sell them, power specialists they are, constitute a Johns-Manville Service to Industry of great value in the industrial field.

Shrewd plant engineers know this and regularly call upon Johns-Manville...men and materials . . . to reduce operating costs by getting finer performances from horsepower.

JOHNS-MANVILLE

SAVES HORSEPOWER

JOHNS-MANVILLE CORP., MADISON AVE. at 41st St., NEW YORK. BRANCHES IN ALL LARGE CITIES. FOR CANADA: CANADIAN JOHNS-MANVILLE CO., LTD., TORONTO



When snow melts on top of the building in below-freezing weather it is an infallible indication of a heat leaking roof. It shows that heat intended for your top floors is being lost through the roof; that fuel is being wasted.

Heat loss through roofs can be virtually stopped, top floors more easily heated, and a large percentage of fuel saved by insulating roofs with Armstrong's Corkboard. Armstrong's Corkboard is a nonconductor of heat of such efficiency that its use reduces the heat flow to a negligible amount. A roof so insulated holds the heat inside, makes top floors and single-story buildings more comfortable, and in fuel alone saves enough to pay for itself in a very few seasons.

There is another factor, too—summer heat. A cork-insulated roof is just as effective in keeping the sun's heat outside as in holding furnace heat in. Workrooms under roofs insulated with Armstrong's Corkboard are many degrees cooler in summer.

A full explanation of the benefits of roof insulation and estimates of cost will be furnished on request. Write for a copy of the book, "The Insulation of Roofs with Armstrong's Corkboard." Armstrong Cork & Insulation Company, 195 Twenty-fourth Street, Pittsburgh, Pa.

Armstrong's Corkboard Insulation

for the Roofs of All Kinds of Buildings

the business of a retail store is to buy and sell merchandise?

Is there not a danger of giving our businesses too largely into the hands of those who love the complex—who unconsciously strive for the building of a great apotheosis of system, so involved that we no longer can trust the business of buying and selling to simple, common sense men and women?

Promotion That Has Paid

THE Southern Pine Association was organized in 1914, and since that time its supporters have contributed more than \$6,500,000 for its work. The association feels



that the work has been so successful that it has recently issued a booklet reviewing it.

In order that the small house builder might have the assistance of the best architects, the association has conducted a plan service department. Six hundred thousand plans have been distributed and eleven thousand complete sets of plans and specifications sold.

Another of the important projects with which the association has been associated is standardization. Secretary Hoover said: "I desire to compliment you on the progressive stand which your organization has taken in this matter." This work has received wide publicity and has met with general acceptance.

The next logical step for the Southern Pine Association was to impress the building public with the fact that good materials would not produce a good structure unless properly used. A national campaign for better construction met the approval of the building trades and professions all over the country.

Labor Pledged to Cut Cost

THE tremendous savings and cost reductions possible in manufacturing were discussed at a conference called by the Philadelphia Labor Union and the Philadelphia Labor Institute. William Green, president of the American Federation of Labor, pledged cooperation of labor in every attempt to reduce waste but declared that the resulting benefits should show proportionately in higher wages as well as increased profits, according to the Monthly News Bulletin of the Division of Simplified Practice, which quotes Mr. Green as saying:

Waste in industry may be divided into three classifications—material waste, human waste, and spiritual waste. Labor has given most careful thought to each of these qualifications, putting emphasis upon the human and spiritual rather than upon the material classification.

Material waste in industry greatly affects the economic life of the workers. As waste detracts from the earnings of industry, so it detracts from the wages of employes.

The difference between industrial success and industrial failure is many times found in the wasteful processes which often attend industrial operations.

So long as industry is only partially efficient labor believes that the wages paid can be substantially increased through an increase in industrial efficiency and the elimination of waste. By the same process the cost of manufactured articles to the public can be materially reduced.

The elimination of waste through the application of Simplified Practice makes for more efficient labor due to making training of employes more simple, better earnings, more permanent employment, etc.

Industrial Prospects

WE ARE glad to report the experience of chambers of commerce with industrial prospects for such light as it may throw on this problem of getting new industries. During the past year the Industrial Committee and Secretary's office of the Sycamore, Illinois, Chamber of Commerce thoroughly investigated forty-five propositions with the following results:

Eight of the concerns investigated desired to sell stock in our community totaling \$755,000; nine concerns were seeking financial aid; nine leads were unresponsive to our correspondence; ten leads proved to be concerns which had no intention of moving at that time; seven inquiries were followed up to the point where it was revealed that the concerns were either not substantial, wanted inducements of some nature, or required from 60 to 90 per cent female labor. At the present time we are negotiating with two prospects considered good and are exerting all effort to close with at least one of them during 1927.

Chamber Administration

THE National School for Commercial and Trade Organization Executives has recently published a book on "Chamber of Commerce Administration." This book is a compilation of the material in the ten courses given in the first-year course at the school. Each topic has been carefully revised and reviewed by secretaries fully competent to treat it in the light of the generally accepted best practice. The ten chapters cover: "The Organization or Structure of a Chamber of Commerce," "Program of Work," "Meetings and Committee Management," "Membership," "Finance," "Publicity," "Office Administration," "Commercial Activities," and "Civic Activities."

The book may be obtained for \$3.00 from the Board of Managers, National School for Commercial and Trade Organization Executives, 134 North LaSalle Street, Chicago, Ill.

The Slower, the Fewer

BELIEVING that the mounting toll of automobile accidents is due in part to the emphasis that automobile manufacturers give to speed in their advertisements, the Better Traffic Committee of Pittsburgh has launched a campaign to take the emphasis off speed and put it on power and safety.

To this end a letter has been sent to the



leading manufacturers of automobiles and to various national organizations pointing out the trend to advertise speed, quick acceleration, and high power of the various models. To quote the letter in part:

The Better Traffic Committee of Pittsburgh believes that this emphasizing of high speed has caused an unfortunate psychological reaction among automobile driv-

When you STOCK



—what protects your inventory?

Obviously, the original-entry receiving slips, invoices, sales tickets and requisitions on which stock-records are based, according to the kind of business. Not so obviously, carbon duplicates of sales records that tell what to buy, of purchase orders that tell what to expect, of other forms concerned with the present and future needs of the business.

In order to have efficient stockkeeping, it is necessary to handle many other operations correctly.

Stock-keeping is a KEY Operation.

Protect it! Efficiently!

Rediform Sales and Manifold Books "Wiz"Autographic Registers Continuous Interfolded or Continuous Interfolded or Continuous Interfolded or Continuous Interleaved Continuous Interfolded or Continuous Interleaved Property Open The Key Open T

Principles of Good Stock-keeping. Accurate accounting for all that comes in or goes out; prompt notification to PURCHAS-ING and often to SALES when items are out of stock; prompt notification to STORES and RECEIVING when items are ordered.

These are enough to show that good stockkeeping is a complicated, not a simple, operation. Exact duplicates of orders, shipments, requisitions, receipts, are necessary to protect the money tied up in stock and to move the goods out at a profit.

Write for our booklet, "The Key Operations of Business." This book contains matter never before published in regard to the proper "linking up" of business operations by correctly designed forms. A copy will be sent at your request, free of charge.



Rediform Sales Books and Manifold Books

Every type for every purpose—with all the latest improvements, and a service in design that makes any type more efficient.



Rediform "WIZ" Autographic Registers

Note that sides are cut away to show the convenient, easily audited Flatpakit forms, and locked compartment for audit copy.



Rediform Continuous Interfolded and Interleaved

Permit variation in color, weight and quality of different sheets. Rediform Interleaved is interleaved with carbon paper throughout.

For further information, fill out coupon below, attach to business letterhead and mail to

AMERICAN SALES BOOK COMPANY, LIMITED, ELMIRA, N. Y. Factories: Elmira, N. Y., Niagara Falls, N. Y.

Have your representative call to discuss the application of Rediform carbon copy records to key operations of my business.

Name		
Business	Report Holling &	
Position		
Addense		



An Ætna Fidelity Bond Is a Badge of Merit

A man who is bonded by the Ætna is one of the elect. He has been tested and not found wanting.

When application is filed for an Ætna Fidelity Bond, a rigid investigation is made of the applicant's character and record. Consequently, the very issuing of the bond is a certification of trustworthiness.

C, No employer should hesitate in any instance to request a bond. It is not an intimation of doubt, but simply a recognized; business-like procedure. It is more to the employee's advantage to be bonded than not. Bonded employees take pride in the fact that their honesty is thus recognized.

Ætna Fidelity Bonds

are written in a great variety of forms to meet every possible requirement. They are guarantees of honesty, backed by an organization of great financial strength.

Ask Any Ætna-izer

to explain the bond best suited to the needs of your business or organization.



ÆTNA CASUALTY AND SURETY CO.

affiliated with ÆTNA LIFE INSURANCE CO.

Hartford

Connecticut

ers of the country. True, the drivers do not need to use all the high speed advertised but . . . when a driver is told that his car will travel 80 miles an hour, his natural impulse is to open wide the throttle at the first opportunity and discover for himself whether performance equals promise. . . Our highways were not designed to accommodate the excessive speed now being advertised.

The Value of Road Information

PERHAPS no field of endeavor offers quite the opportunity to chambers of commerce to render an appreciable service or to gain such valuable business and social contact as does the efficient and recognized Road Information Bureau of every such organization," writes Mr. Karstedt, secretary of the Lake City, Florida, Chamber of Com-merce. He continues:

The reasonable assurance of passable highways will add millions of tourists within the next few years to the myriads who now spend many an anxious hour in contemplation of their next automobile tour. In many strategic points, the Road Information Bureaus of local chambers have become a business. The chamber



that is neglecting the opportunity to render the traveling public reliable road information is lame indeed in what portends to be a wonderful opportunity.

As yet, no concerted arrangement has been effected between chambers of commerce for the exchange of road informa-tion, the most reliable information perhaps being disseminated by automobile and tourist associations as well as by state high-way departments. Several state highway departments have assumed an initial step in circulating a weekly or monthly map showing road construction, detours, washouts, condition of bridges, etc., and yet much correspondence is required to maintain the information fresh enough to be given out with some degree of accuracy.

Coming Rusiness Convention

Date	City	Organization
November	Cuy	Organization
1- 3	Chicago	American Management Association.
1- 4	Atlanta	National Association of Ice In
2-5	Tacoma	Pacific Logging Congress.
7-12	Chicago	Automotive Equipment Asso
***	Destar	ciation. New England Paper Merchants
10		Association.
14-18	Cleveland	National Standard Parts Association.
15-16	High Point, N. C	CSouthern Furniture Manufac
56	Common Co	turers' Association.
15	Chicago	National Association of Finance
15-18	Omaha	CompaniesMid-West Implement Dealer
10-10	· · Califfranti-	Association.
16	New York	American Railway Association
16	New York	National Association of Leathe Belting Manufacturers of th United States.
16	New York	Railway Business Association.
16-17	New York	National Founders' Association
10-17		National Industrial Traffi League
16-18	Wiehita Falls	Southwestern Ice Manufactur
		ers' Association.
19	Boston	National Association of Woole
20.00	D	and Worsted Overseers.
20		Rocky Mountain Retail Furni ture Association.
20	Chiengo	American Association of Cream
		ery Butter Manufacturers.
29-30	.Chicago	International Association of Fairs and Expositions.
96 The 6	Palmen	National Association of Amuse

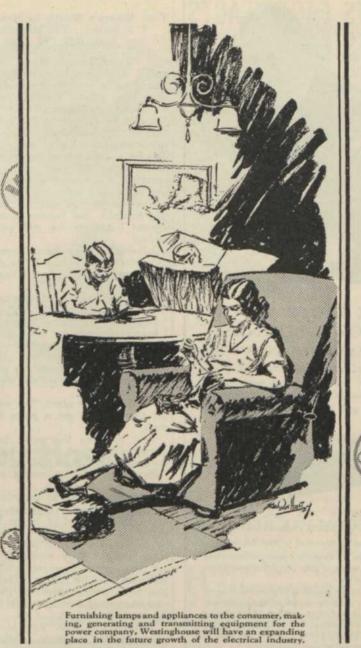
What the average family speaks of as "Light" you'd speak of as "Gloom"

BURN a five-light chandelier in your living room for five hours and you'll use as much current as the average wired home consumes in an entire day for every purpose. At its present rate of consuming current, the average American family would have to eat, dress, and bathe in the dark if it left the living room fully lighted, according to good lighting standards.

There's a vast difference between having electricity and having enough electricity, and that represents the light and power companies' most promising field for immediate growth.

In 1925, the "domestic load" was 5,600,000,000 kilowatt-hours. If every home within reach of central station lines were adequately lighted and generously applianced (including refrigerator and range), this figure would jump to 98,000,000,000 kilowatt-hours. This amount is almost 100 per cent greater than the total of kilowatt-hours generated for electric light, power and heat in homes, factories, and on railroads and farms combined.

WESTINGHOUSE ELECTRIC & MANUFACTURING CO. Offices in all Principal Cities Representatives Everywhere Localized Service — Men — Parts — Shops



Westinghouse





ECONOMIC TRENDS IN THE ELECTRICAL INDUSTRY

On the Business Bookshelf

Your Money's Worth, by Stuart Chase and F. J. Schlink. The Macmillan Company, New York, 1927. \$2.

In "Your Money's Worth" Stuart Chase and F. J. Schlink have written that admirable thing, a readable book about business. With their general premise that there is a great need for the education of the consumer. it would be difficult to find fault. days of "high pressure" selling, of skilful and appealing advertising, of newly awakened desires for a multitude of things, the buyer who would make the most of his dollars and cents has a new need to beware. But business is taking a new view of the doctrine of caveat emptor (in spite of Messrs, Chase and Schlink), and business does grow more upright but there are still pitfalls for the

Advertising may have learned to avoid superlatives and moderate its claims, but it still can refrain from telling everything about its product.

I once said to the advertising manager of a well-known automobile:

"The most convincing auto advertisements I have read lately are those of the so-and-so Six (a rival car). The points they set forth in its favor are logical and convincing, not just appeals to sentiment, to get out in the open and see the far-flung sky and God's green earth."

"Yes," said the agent, "but why don't they eay they haven't got a seven bearing crank

That indicates the target towards which Messrs. Chase and Schlink would have the consumer aim. How shall he be taught,

First, that a seven-bearing crank shaft is something to be sought.

Second, how shall he know that the auto-

mobile he purchases is so equipped?

What I have said of "seven bearing crank shafts" is only illustrative. The authors of "Your Money's Worth" apply the point to many things. They would have the buyer ask what is in his silver polish, his breakfast cereal, and his roofing. They would have him look for the weight of packaged foods and compare that weight with the weight of similar foods in bulk.

With much of what "Your Money's Worth" advocates the business public will agree. Consumer education is an excellent thing. The more the buyer asks intelligent questions and the more honestly those questions are answered the better in the long run for both buyer and seller. But it is unfortunate that the authors seem at times to be amazingly reckless in their presentation of facts. Take this sentence:

"Try to discover . . . the least adulterated five cent candy bar; the least doped cigarette.

A not unreasonable inference from that sentence is that all five cent candy bars are adulterated and all eigarettes are doped. Are they? I doubt it. That there are no adulterated candy bars I cannot prove, nor can I prove that no cigarettes are adulterated, but I am sure such offenders are uncommon.

"Theoretically Big Business should enor-

mously cheapen the cost of living. In fact it has done nothing of the kind-with a few outstanding exceptions. In spite of mass production, fixed prices, wide distribution, the general price level moves steadily up-

Does it? Price indexes with an arbitrary year as 100 may move upward, but suppose we measure not by money, but by that

other commodity, time. The average man today gets infinitely more in the way of necessities and luxuries for 8 hours' work a day than his grandfather got for 12 hours of labor. And that is true for the mechanic in the automobile factory, the nose and throat specialist on Park Avenue, New York, or the wheat farmer in Kansas.

One more instance! Our authors ask this

rhetorical question:

When will the casualties begin to appear in the stockings; and why is it a safe bet that a pair knitted by grandmother will wear three times as long?"

Three times as long as what? As a modern woman's sheer silk stockings? Given a pair of factory made woolen stockings of today, and a pair of grandmother's, subject them to the same conditions of wear and wasting and are we so certain of that glibly-uttered "three times as long"?

It's a pity that a book which had so good a purpose and so fine an opportunity should be based on so loose a foundation.-W. B.

Industrial Credits, by Robert Young. Harper & Brothers Publishers, New York,

The author, credit representative of the Carnegie Steel Company, writes of the function of the credit department. His book will be useful to a salesman and credit man.

The credit man has the unenviable position of restraining the sales department from making sales without considering collections. A credit man must have the ability accurately to judge the customer's business and the courage to uphold his decision against his company which may not choose to extend that credit or the salesman who may wish to extend more.

Investigation methods are explained including the agencies, such as Dun and Bradstreet, special agencies, and other sources.

Mr. Young advances a point that Prof. Ripley might find a useful argument in his battle for income statements as well as balance sheets—the balance sheet alone can be juggled too much for the purposes of a credit man.

The ratio system of interpretation of financial statements, restricted and special credit terms, collections, and deferred accounts are some of the other problems discussed.

RECENT BOOKS RECEIVED

Advertising Fluctuations—Seasonal and Cyclical, by William Leonard Crum. A. W. Shaw Company, Chicago and New York, 1927.

Banking Theories in the United States
Before 1860, by Harry E. Miller.
Harvard University Press, Cambridge, 1927

The British Coal Dilemma, by Isador Lubin and Helen Everett. The Mac-millan Company, New York, 1927.

Business Cycles-The Problem and Its Setting, by Wesley C. Mitchell. National Bureau of Economic Research, Inc., New York, 1927.

Credit Bureau Management, by J. R. Truesdale. Prentice-Hall, Inc., New Truesdale. Prentice-Hall, York, 1927. \$5.

How to Finance Home Life, by Elwood Lloyd, IV. B. C. Forbes Publishing Company, New York, 1927. \$2.50. Industrial Relations in the Chicago

Building Trades, by Royal E. Montgomery. University of Chicago Press, Chicago, 1927. \$3.



"GIVE ME FACTS ABOUT MY OWN BUSINESS"

DEMANDS THE EXECUTIVE

You need facts to make decisions. Opinions are not facts-and only correct fact giving, fact producing, informative records will keep your business sound.



EGRY COM-PAK REGISTER

Adapted to either Roll or Fold Pak forms.

Provides the means to release you from worry over the details of your Initial Business Trans-

You will get records telling the entire story, whether it be the transaction of a sale, purchase, shipping, or production operation, or one or more records for Receiving, Billing, Delivery (Freight, Express, Truck, Parcel Post) Storing, etc., in any department of your business.

Every record clean cut and legible. Every record numbered consecutively, Every record punched for filing.

All bills printed to your order and specific to the purpose for which they are intended

Every record easily and conveniently made from Roll or Fold Pak forms, issued one set after the other to a uniform size by one turn of the register handle, quickly, accurately and dependably.

Perfect registration of from two to six copies to a set guaranteed.

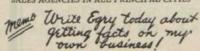
Record your transactions on the COM-PAK and you secure permanent informative records which place responsibility and protect profits.

Let us show you how others are obtaining these benefits combined with time and labor saving advantages.

THE ECRY RECISTER COMPANY



SALES AGENCIES IN ALL PRINCIPAL CITIES





"Uncle Sam" is one of the great fleet of 60 named Pennsylvania freight trains that have set remarkable records for regularity and dependability.

EVEN in this era of telephones, the housewife going a-marketing is a familiar sight. Now as in bygone days she takes her basket on her arm, raises her parasol and trips blithely to butcher and grocer—determined to get the freshest goods for her table or know the reason why.

One of the main reasons why the Eastern housewife is assured of always obtaining the choicest fruits, vegetables and meats is "Uncle Sam." Every day this big Pennsylvania freight brings the "perishables" of the West and Southwest through St. Louis to Eastern Markets.

While the good housewives of the seaboard sleep peacefully, "Uncle Sam" comes roaring down the rails, bent on bringing in his load on time. Through the lowlands, over mountains and rivers, past hamlets and

cities rolls this Pennsylvania flyer pulled by locomotives of the modern type—the kind equipped to keep an important freight train always right on schedule.

"Uncle Sam" doesn't take any chances with hot weather. So when the big rattler pulls out every bunker is filled to the brim with North Pole

Shippers:

Are you giving the man who routes your freight the time and opportunity to effect the economies, contribute to the new business strategy which in many industries is considered the most important development since Mass Production?

The Industrial Traffic Managers of many organizations have been instrumental in the speeding up of turnover—in the reduction of inventories—and in the opening up of new selling territories to which improved freight transportation has given them access.

soil. And lest these cool preserving chunks begin to get low "Uncle Sam" pulls into the icing station at Columbus, Ohio.

HERE he doesn't stop to talk to the iceman's daughter. There's no waiting—no delay at all. Up go the hatches and the yawning bunkers are again filled—quickly and efficiently at the rate of one car per minute. And at Huntington, Pennsylvania, more shots of refrigerator fuel insure the preservation of his precious cargo until it reaches the Eastern Markets.

Regularly and dependably "Uncle Sam" leaves St. Louis on time—and just as regularly he reaches the Eastern Markets. Consistency of on schedule arrival is one of this freight train's most distinguishing characteristics. Of course, "Uncle Sam" needs a lot of cooperation in his headlong dash to the sea. And this is just what he gets from an efficient train crew and from thousands of men all along the line whose business it is to see that he holds to his schedule.

Carries more passengers, hauls more freight, than any other railroad in America

PENNSYLVANIA RAILROAD

stop the waste of stamping mail by hand-In over 100,000 offices, the Multipost Stamp Affixer and Recorder is cutting mailing costs. Try a Multipost, free, in your own office. Prove its economies, sanitation and orderliness. Mailing costs (stamps and labor) mount up to a sizable sum in a year. You can save enough of this outlay to pay for a Multi-post, and then have it earn a profit worth many times its moderate cost.

Save Time,

Stamps, Money The Multipost releases, moistens, cuts off, af-fixes, and records each stamp in a single splitsecond thrust of its plunger. Five operations by hand-one with the Mul-

tipost.
The Multipost keeps stamps in rolls in one safe place. None are lost or spoiled. The Multipost automatically counts each stamp used-makes stamp accounting practicable—discourages misuse

of postage.
Fingering and fumbling with sticky stamps is eliminated. Multipost makes a clean job of it.

ONE

clean

ULTIPOST

No matter how large or small your office, the Multipost will pay for itself and then earn profits. Every time it is used, it saves—the more frequently it is used, the sooner it saves its cost.

MULTIPOST

Stamp Affixer and Recorder

Representatives in all Principal Cities



Multipost Co., Dept. D-11, Rochester, N.Y. Send Multipost on Free Trial Send Boooklet (check your preference)
Name
Firm
Address

Government Aids to Business

Reports of government tests, investigations and researches included in this department as available (for purchase or free distribution) only when a definite statement to that effect is made. When publications are obtainable the title or serial number, the source, and the purchase price are included in the item. We will be glad to furnish them to our readers at the price the Government charges.

THE DIVISION of Simplified Practice of the Department of Commerce issues a Monthly News Bulletin. A summary of the Division's work shows a

wide range.

The Progress of the Work on

The manufacturers of Standardization vegetable ivory buttons

met recently and dis-cussed the advisability of applying the principles of simplified practice to their commodity.

Manufacturers of bee-keepers' supplies are being circularized for their views regarding the application of simplified practice.

The Division is circularizing the manufacturers of the vitreous china industry, the porcelain plumbing fixtures, and the hospital groups for their assurance of cooperation in connection with a survey to determine the sales of basic fixtures for 1926.

A report on the sales and varieties of composition books will soon be issued and used as a basis for preparing a tentative simplified practice recommendation.

A questionnaire has been sent out to all the manufacturers of surgical gauze.

Agenda are being prepared for a general conference to establish recognized grades for ash handles for farm hand tools, and hickory handles for shop and construction tools, etc.

The calf leather groups of the Tanners' Council is working on a program of simplification and standardization.

A general conference of manufacturers of electrical refrigerators and refrigeration material was held recently to work out a simplification program to be carried out during the coming year.

The simplified practice committee of the Turnbuckle Industry has completed its survey and has drawn up a tentative simplified practice recommendation covering sizes of turnbuckles.

A questionnaire will soon be sent out to the manufacturers of pocket knives.

Recommendations adopted by manufac-turers and wholesalers of composition blackboards will go into effect April, 1928.

The simplified practice recommendations covering New Billet Steel for concrete reinforcement and solid section steel windows, which were recently adopted at general conferences of manufacturers, distributors and users held under the auspices of the Division, are receiving very favorable comment from the industry, and it is expected that these recommendations will be published in booklet form in the near future.

T IS EXPECTED that the Southeastern Survey of market conditions in the states of North and South Carolina, Georgia, Flor-

ida, Alabama, and east-ern Tennessee will be Southeastern States Survey ready for public distribu-To Be Released tion by the first of No-

vember. This is the second of the regional market surveys to be conducted by the Domestic Commerce Division of the Department of Commerce. It is intended in time to cover the whole United The first survey covered the Philadelphia trade area, comprising southern New Jersey, Delaware, and all of Pennsylvania west to, but not including, Pittsburgh. This second survey is even more complete than the Philadelphia report.

The place of the regional survey cannot adequately be filled by the various statistics now available for small political units, nor even by a census of distribution. It is important to measure, if possible, the actual volume of sales and consumption, or to keep current information on population, sex, age, occupation, etc., as showing actual present conditions and suggesting the immediate future; but it is only when such data are correlated and combined with a picture of the economic life of a region that they really furnish the basis for long time planning in building a sales and distribution organiza-

As far as possible, the Southeastern Survey presents every fact concerning population, resources and activity in the light of its significance to marketing and future economic trends.

Every available gauge of purchasing power and living condition is employed, but these factors are considered in relation to the prevalence of hand labor in agriculture, the mild climate, the scarcity of large cities, the rural isolation and other factors that lie behind it, and as affected by influences for change.

Consideration is given to the geographic basis of commerce. Industries are evaluated in respect to production, trade, employment, and income in the area.

Agriculture, mining, hydroelectric develop-ment, forestry and manufacturing are presented as the main sources of wealth and income within the southwest. In reference to agriculture, mention is made of plans to diversify and supplement it.

Minerals and water power are discussed in relation to conditions affecting the development of specific deposits and power sites. Forestry is discussed in connection with reforestation plans; manufacturing in regard to the conditions which are taking industry into the south and which will determine the character of further industrialization. Particular attention is given to commodity movements, sales problems and indexes of income and consumption.

Nation's Business will be glad to furnish the Southeastern Survey at cost to those interested when it is available.

THE BUREAU OF STANDARDS, Department of Commerce, has for many years been engaged upon an investigation of accidents occurring in

Construction of the electrical industry Overhead and of methods of con-Electrical Lines struction and installation

which would obviate the hazards connected with this work. The result of the investigation is represented in part by the publication, National Electrical Safety Code, which is now in its fourth edition and which contains rules based upon experience and extensive study.

The code is divided into five parts dealing with different branches of the subject. The part dealing with the construction and maintenance of electrical supply and communication lines has just been issued by the Bureau as Handbook No. 10. It contains engineering standards for the construction of pole and tower lines, including their strength, the arrangement of wires, the proper clearances between conductors and between conductors and supports, and all the various details that go into the erection and maintenance of such overhead lines

Handbook No. 10 may be obtained from

Responsible

Because it knows its power, because it knows its function, because it knows its clear-cut policy—and hews to the line—and because many thousands of Northern and Central Californians look to it, trust it.

The San Francisco Chnonicle



When business demands speed and accuracy use RADIOGRAMS

RADIOGRAMS go direct to: FRANCE GERMANY GREAT BRITAIN HOLLAND ITALY NORWAY POLAND SWEDEN ARGENTINA BRAZIL HAWAII, JAPAN the PHILIPPINES the DUTCH EAST INDIES and FRENCH INDO-CHINA and to ships at sea

Radiograms go direct to the country of destination without relay. And this directness means speed and accuracy of transmission and promptness of reply. Thousands of prominent business houses are using the speedy communication service of Radiograms every working day of the year.

When business demands speed and accuracy just tell your secretary, "Send that message as a Radiogram



In New York, Boston or Washington, phone for an RCA messenger for speedy Radiogram serv-In other cities file Radiograms to Europe and South America at any Postal Telegraph office; to transpacific countries at any Western Union office.

Send Today for Radiogram Rate Sheet

RADIO CORPORATION OF AMERICA

RCA OFFICES IN THE FOLLOWING CITIES NEW YORK CITY

64 Broad Street Hanover 1811 120 Cedar Street Rector 0404 19 Spruce Street Beekman 8220 126 Franklin Street Walker 4891	25 East 17th Street
---	---------------------

Songress Street Liberty
N, D. C., 1112 Connecticut Avenue, Main
So. La Salle Street Dearborn
SCO, 25 Geary Street Garfield
T. H., 923 Fort Street

the Superintendent of Documents, Government Printing Office, Washington, D. C., at 60 cents a copy.

THE TEXTILE DIVISION of the Bureau of Foreign and Domestic Commerce has established a Textile Maintenance Section

to serve the dyeing. Textile Division cleaning, and laundry industries and to put at Broadens Its their disposal the facili-ties of the Textile Divi-Activities

sion and its innumerable contacts in this country and abroad.

That section will collect through its representatives in this country and abroad all information that is available concerning the scope and activity and methods of dyeing, cleaning, and laundering, and ultimately it

will make arrangement for an international exchange of ideas and methods looking toward the improvement of conditions and public relations.

The laundry, and dyeing and cleaning industries are essentially service agencies. Their problems in performing satisfactory service have, with the demand for variety in style, finish and construction of cloth and garments, increased tremendously. It has been necessary for these industries to spend large sums of money in analysis and re-

Their relations with manufacturers of cloth and garments, and with finishers, dyers and processers of fabrics have improved in the last year, but it is expected through the medium of the new Textile Maintenance Section to bring about a better recognition of the common interests of the various branches of the textile industry.

BULLETIN 448 of the Department of Labor contains a digest of the trade agreements between employers and employes made during 1926. Al-

Trade Agreements though there are few of Employers and provisions common to Employes Studied all agreements, there are

many whose object is similar, such as those dealing with wages, hours, overtime, arbitration and apprentice-

The eight-hour day is very generally observed, and the forty-four-hour week is practically the rule in several trades, notably the building, clothing, longshoremen, metal and stone. The overtime rate varies in the different agreements from time and a half to triple time. Among the other matters covered in the publication are unemployment, seniority, sanitary conditions, and the union label on products.

Department of Labor Bulletin 448 may be obtained from the Superintendent of Documents, Government Printing Office, Washington, D. C., at 30 cents a copy.

THE TRANSPORTATION DIVISION of the Bureau of Foreign and Domestic Commerce has published a series of Bulle-

tins (Domestic A Survey of merce Series 10, 11, 12, the Best Methods 13, 14, 15, and 16) giving of Packing the results of a survey

to determine the best methods of packing for domestic shipment to minimize losses and assure safe delivery. Domestic Commerce Series No. 3 dealt with paper-wrapped packages. The new booklets cover fiber containers, cleated plywood boxes, wire-bound boxes, cooperage and steel barrels, wooden boxes, nailed wooden crates, and baling. The whole series may be obtained for 55 cents or single copies for 5 cents from the Superintendent of Documents, Government Printing Office, Washington,

Ourselves as Others See Us

N THE report that 10 per cent of American racehorses suffer from poor vision, and that by use of spectacles the ca-

And Bettors Can't Always See a Horse

pacity of the horses "to run faster and more consistently" was increased, the Manchester Guardian Weekly speculates

whimsically on the possibilities of adopting glasses for the aid of British thoroughbreds. The appearance of bespectacled horses in a race at the famous Saratoga course suggests that "one may dwell with pleasure on the thought of the animal with impaired vision in one eye only." And it does seem reasonable that "the thoroughbred with a monocle will look a little more thoroughbred than ever."

Of the glasses and the need for them, the Guardian says:

We are not told whether the spectacles are horn-rimmed, but presumably they are, for the kindly owner would hardly ask his horse to wear anything less spectacular than he wears himself . . . we are probably on the



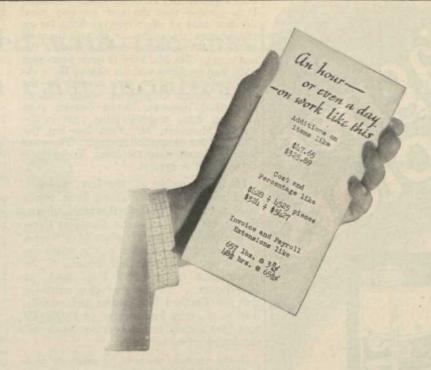
eve of a revolution in British racing just as important-and just as inelegant-as the "monkey seat" which was introduced by the American jockey Tod Sloan at the end of the last century. For since Zev beat Papyrus we cannot assume that British horses are any better than American, and therefore we cannot assume that they have any better eye-sight. If 10 per cent of American horses need glasses, clearly at least the same proportions of our own stables ought to be packed off to the oculist—as they certainly will be if the American method "delivers the goods," for just as we had to take to the "monkey seat" when it was proved that it won races, so we shall have to take to spectacles if they yield the same result.

WHATEVER the new Ford car may turn out to be, the editors of the Nation and Athenaeum feel sure that its ap-

In the Street For Himself!

pearance will signal the So! Every Man outbreak of a "most unmerciful conflict" in the motor industry. As the Nation sees it:

the prizes to be gained in the cheap car market are enormous. For twenty years Mr. Ford enjoyed a marvelous monopoly, which has disappeared and is irrecoverable, for the conditions are completely changed. Two facts stand out: the Chevrolet production figures surpassed those of the Ford eight months ago, and Mr. Ford reading the warning aright, set forthwith to work preparing his immense plant for the manufacture of the new model. The immediate result has been disastrous to Detroit. Tens of thousands of men are out of work and are awaiting the issue of the first battle of the campaign. Mr.



Not a flash demonstration -but a real test

UYERS of Adding-Calculating machines - the discerning ones-are more interested these days in the physical proof of what such equipment will do, than in verbal discussion of the machines themselves.

Why shouldn't they be? When it comes to making a decision, proven facts are always better than anyone's claim, opinion or "guess so."

The chief concern of the buyer therefore, should be to find out which machine will do the most figure work for the least money-all elements of cost considered.

When you find: How many columns a machine will add; How many in-

If not made by Felt & Tarrant it's not a Comptometer

voice and payroll extensions it will figure;

How many cost divisions it will

in a timed test on your regular work -not a flash demonstration on a few selected items, but a real, practical test of an hour, or a day if necessarythen you'll have a positive standard of value by which to gage any machine.

If you are interested in getting the most for your money in figure work, call in a Comptometer man for consultation on ways and means of doing it. No cost or obligation involved. See

> your phone book, under Felt & Tarrant, or write to us direct.

FELT & TARRANT MFG. Co. 1712 N. Paulina St. CHICAGO

> Only the Comptometer has the Controlled-key safe-guard





MOTORS

for Washing Machines

If a Wagner Motor user wanted to compare the Wagner Motor with others, he would find that after being started and stopped over 500,000 times the Wagner Motor would still operate satisfactorily.

Manufacturers of washing machines for household use realize the importance of the motor short-circuiting switch. The new Wagner Switch is of the bakelite disk type...rigid and impervious to moisture. It will give years of satisfactory service.

Wagner Motors can be furnished in either a. c. or d. c. ratings and mounting dimensions permit the interchange of Wagner Motors of different ratings as well as of other motors of standard makes.

All Wagner Motors use the filtered-oil system of lubrication which insures an abundance of clean oil.

Literature upon request



7517-4

MOTORS Single, Polyphase and Fynn-Weichsel Motors TRANSFORMERS... Power and Distribution FANS...Desk, Wall and Ceiling types

WAGNER ELECTRIC CORPORATION 6400 Plymouth Ave., St. Louis, U.S.A.

Ford's genius may be equal to the challenge. It is possible that the new car may meet the new need as effectively, allowing for an altered situation, as the old car met the need of the multitude during the first years of the motor age. But Mr. Ford is some years past sixty, and he fights without allies. He is directly opposed in his own market by the General Motors Corporation, which, with its interlocked concerns, carries heavier guns than any other manufacturing trust in the world. Moreover, Mr. Ford has lost the glamor of his unequalled triumph. The press and the crowd were for him. Today they are watchful or cynical.

In the assembly of the last model T Ford chassis at the Trafford Park works in Manchester is discovered a touch of sentiment, for the Manchester Guardian Commercial believes that "it must have been a sad moment for the little party, which included one man who had helped in the construction of the first Ford made in Manchester. . . " By way of a reminder that the Trafford Park works had contributed to the total Ford output of 15,000,000 cars "not merely in numbers but in ideas," the transport editor wrote:

In the nineteen years of its existence as a factory £405,435,015 has been paid in salaries, or an average of £20,576,132 a year. In the same period Ford dealers have paid employes salaries to the total of £274,444,488, and to employes of other dealers and to office staffs and salesmen a further sum of £781,189,300. The company has paid in taxes in the same period £112,551,440, and it is estimated by the officials that the purchases of materials for the manufacture of the car amount to the huge total of £1,001,733,955.

TRANSLATED into the King's English, our "instalment buying" becomes "hire purchase." At King's College Professor Seligman of Columbia

A Softer Name University gave an esti-Won't Keep mate of the volume of Collectors Away business done in the United States under

that system. As reported in the Manchester Guardian Commercial, he said that-

as a result of the exhaustive inquiry into the system which he has been conducting at the



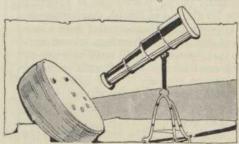
request of the General Motors Corporation, he had come to the conclusion that out of a total volume of retail sales in the United States of \$38,000,000,000 in 1925, sales on the deferred payment plan amounted to \$4,500,-000,000, or rather less than 12 per cent. In the automobile industry the percentage runs much higher than that, though not so high as the 75 or 80 per cent frequently spoken of, for Professor Seligman estimates that 59 to 60 per cent of all cars sold are sold "on time."

ISE OF X-rays in the United States to locate holes in Swiss cheese and to determine their size invites a paragraph of comment from the Man-

Perhaps Science chester Guardian Weekly: Will Show Up

the Bores, Too This should come as a ray of hope to those thousands of diners-out who have felt that

they were not getting their fair share of holes in Gruyere. Many a man must have experienced that sense of baffled rage which comes



on realizing that another patron has more holes in his cheese than one's self. Complaints to the waiter have resulted in but an ineffective shrug of the shoulders or a hopeless shake of the head. Now with the X-rays one may demand that both portions of cheese be submitted to scientific test, thus assuring fair do's all 'round. Science is indeed wonderful.

NE OF these days the world's wife will revolt against the endless repetition of unnecessary tasks and demand for her

house some of the sci-Over Here Some entific efficiency to One Would Call which her husband has That Poker Hand become accustomed in

office and factory. And along with that belief, the writer of "A Business Man's Diary" in the Manchester Guardian Commercial contends that science has scarcely peeped into the houses of the many-"every modern convenience" is still the prerogative of the comparatively well-to-do. In every town he sees-

thousands of chimneys continuously pour out the soot and dust which thousands of housewives as continuously dust from their furniture or wash from their clothes. The hand that wields the poker soils the world and maketh rich the soapboiler! In New York, I see, the domestic fire is being replaced by a steam supply service; the steam is produced in a central building, and surrounding dwellers are supplied by meter. I do not know how far such a service is applicable, but at present, I am told, New York annually consumes 7,000 million pounds of steam.

DECISION of our Internal Revenue A Bureau that an author's royalties on books sold are "unearned income" and are taxable at a rate higher

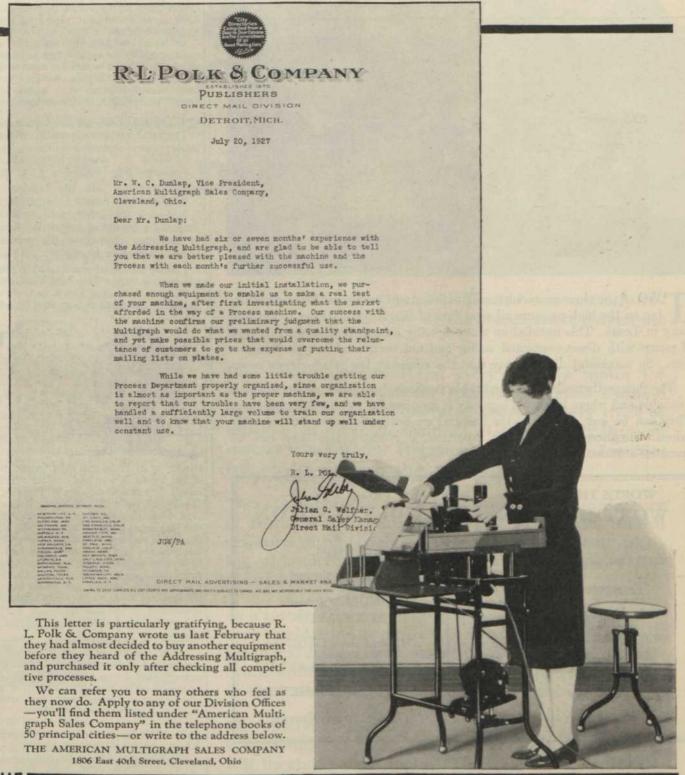
They Might Pay by a quarter than salthe Tax with aries and professional Reader Interest fees leads the Manches-

ter Guardian Weekly to

"trust that the new heresy will not cross the Atlantic." This decision, the Guardian believes, "is probably the first legislative expression, curiously widespread, that authors do not work." But even though the tax gatherers have taken up the cry, "their justification is not obvious." As the Guardian reasons it,

They might argue that the purchase of

"Better pleased with the machine and the process with each month's successful use"

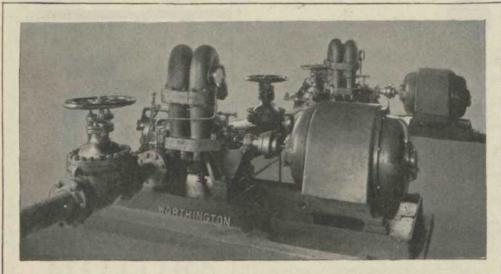


addressing MULTIGRAPH

Pioneering Again!

WORTHINGTON

Centrifugal Pumps, put to new use, show saving, efficiency and reliability in pipe line service



TWO of the three motor-driven Worthington Centrifugal Pumps operating on the high-pressure oil pipe lines of the Magnolia Pipe Line Company in Texas. This installation was originally an experiment, for this type of pump with direct-connected motor had not been used in pipe line service. So successful did it prove that the company has taken eleven more.

The pumps themselves are applicable particularly where electric power is available and where increased capacity is required on existing oil pipe lines. They can be cut right in on the line and are both efficient and moderately priced. Furthermore, operating attention is reduced, for they can be operated automatically.

WORDS THAT MEAN WORTHINGTON

VPioneering
Trustworthiness
Experience
Competency
VEfficiency
Conservation
World-Wide

PRODUCTS OF WORTHINGTON

PUMPS
COMPRESSORS
CONDENSERS and
AUXILIARIES
OIL and GAS ENGINES
FEEDWATER HEATERS
WATER and OIL METERS
Literature on Request

WORTHINGTON



WORTHINGTON PUMP AND MACHINERY CORPORATION
115 BROADWAY, NEW YORK CITY BRANCH OFFICES IN 24 CITIES

each additional copy of a book involved its author in no additional exertion, and therefore that he had done nothing to earn the royalty on each copy sold. But, then, how is an author to be paid? Publishers would look very glum if they had to pay down all that royalties in due course would bring in; and clearly an author is entitled to some reward for the labor demonstrably involved in writing a salable book. . . . It may be, of course, that the Bureau regards authorship as a spare-time hobby from which no one counts on a living; or it may think that a book is an investment producing highly irregular dividends.

An agent holding the rights of a book might possibly be regarded as holding an investment. But it would be curious doctrine to say that an author, having "invested" three months' labor in a novel, did not "earn" the product of his investment.

SKYSCRAPERS are the bipeds of architectural creation—vertical streets that have risen to their feet and now stand up-

They Do Put the Race on a Higher Level right like human beings, declares L. B. Nannier in the London *Nation* and *Athenaeum*. But in our tall buildings he

does find a beauty of proportion other than in creatures riveted to the ground. Of their architecture he writes:

The skyscraper of about 1910 is related to the human form. The New York municipal building is fine; it is like a man with broad shoulders; his head is bent in a broading at-



titude; in darkness and mist (when the glare of the crown is softened and its detail is effaced) it resembles Rodin's "Penseur." The Woolworth building is hideous; it has a long neck and cramped, narrow shoulders; from the Municipal Gardens it looks like a giraffe, the joy of children and caricaturists; from the river, like a bird with its wings tied to the back; and its misshapen body is covered with petty decoration which, to say the least, is wasted, for it becomes practically invisible at the distance from which alone a proper view is obtained of the building.

And for conclusion, he gives this observation:

... A third stage is being reached in the architecture of skyscrapers—the most recent among them are no longer overgrown houses or lonely giants but 'phantom cities, colossal piles, rising in "zones" with vast articulated bodies, silent Towers of Babel.

BY THE English of a correspondent of the Manchester Guardian Commercial, our self-service stores are changed to "help yourself shops"—a

But You Don't Have to Tip a Dumb Waiter phrase that immediately prompts a commentator to a vision of "luncheon bars." With further

explanation, that mirage fades into the reality of "grocers' shops," where

the goods are laid out in sections, plainly labelled and priced, and such assistants as are visible are like the men employed in muse-ums, watch dogs which have been trained to dust

The purchaser enters at a turnstile, where she is handed a bag, and she goes from section to section, selecting her require-Then, quitting by another turnstile, she hands her bag to an assistant, who makes up the parcel and presents the account. Result, the purchaser's time and the shopowner's money are saved, for each purchaser is her own assistant.

What a perverse idea of the function of a

shop!

And how absurd to imagine that a substitute for the shop assistant can be found in any number of dumb waiters. A shop is a place not only where wants are satisfied but where they are created, where, in short, some of the noble arts of civilization receive their impetus; the shop assistant is a high priest of these arts!

And of what use in selling is a dull, inanimate label? The most famous fruit tree in the world, you will remember, was well enough labelled, but it needed a cunning salesman's subtle art to create the taste for

NEARNESS may be good reason for the large volume of Germany's automotive exports to Scandinavian countries,

but the popularity of Well, Isn't the American products is Auto Our Gift not so easy to explain, To the World? says a writer recently in the London Spectator

commenting on the lack of British products

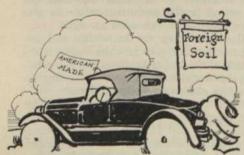
to be found there.

"Why should we find American motor cars, tools, and tooth pastes everywhere in Scandinavia?" he asks by way of preface to a report of his observations.

It is not only the cheap American cars, but also those of higher price that one finds. While breakfasting one morning at the Grand Hotel, Stockholm, I noticed three Packard taxis on the rank outside the hotel.

In the ten countries I recently visited I do not think that I saw two dozen British cars. I was told that the American export trade in motors has been built up by means of special export trade corporations, which finance the operation and permit the cars to be supplied on the instalment principle.

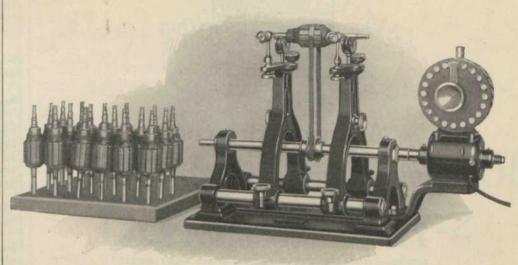
One leading business man told me that the



some enterprising American manufacturers create trade is to give three or four cars to leading residents.

Another friend told me that an extra smart car which I had noticed on the taxi rank at Helsingfors must have been given to its owner to start the fashion in this particular

He suggested that the giving of half a dozen cars to carefully selected taxi drivers in each of the large northern towns would be the best way to introduce cars of British manufacture which are now not a monopoly, for I noticed many French, Belgian, Italian, and German cars. It was only the British which were missing.



Do Your Motors Vibrate?

Vibration in an electric motor, brought on by unbalanced weight in the armature causes noise, bearing wear and untimely repairs and replacements.

Unbalanced weight can be detected and entirely removed in only one way-By the proper use of a dynamic balancing machine.

Our skilled operators test every Dumore motor for running balance with the specially designed Dumore dynamic balancer, (illustrated above). Every trace of unbalanced weight is removed. Consequently Dumore motors run without vibration and give long, troublefree service wherever they are used.

This special process is the final step in the manufacture of Dumore motor armatures. Preceding it, careful selection of materials, extra insulation, accurate turning of undercut commutators, all contribute to increased life and serviceability.

As a result, Dumore motors are used as power units by an ever widening circle of discriminating manufacturers. Electrical devices equipped with these motors give maximum satisfaction to the buyer and bring greater profit to the builder.

The special advantages you seek may be found in the vibrationless Dumore motor. Data and specifications will be cheerfully supplied. Address our Engineering Department.

WISCONSIN ELECTRIC COMPANY **89 Sixteenth Street** Racine, Wisconsin



A dividend record uninterrupted for 47 years

THROUGH almost a complete half century, A. T. & T. and its predecessor have paid dividends regularly. Its earnings—increasing each year—provide an ample margin of safety above dividend requirements, thus increasing the stockholder's equity.

Vital facts for investors to know about A. T. & T .:

Bell System service has ever kept pace with the nation's development. ¶ Its management is far-sighted, conservative, and yet progressive. ¶ Its laboratories employ 3,500 trained workers, searching for means to bring the nation's telephone service nearer to perfection. ¶ Its plant investment of \$3,000,000,000 includes telephone and central office equipment costing over \$1,000,000,000,000,000 over 54,000,000 miles of wire, 16,000,000 poles and 2,000 owned buildings. ¶ A. T. & T. owns over 91% of the combined common stocks of the operating companies of the Bell System. ¶ Its stock can be bought in the open market to secure a good return. Write for booklet, "Some Financial Facts."

BELL TELEPHONE SECURITIES CO. Inc.



For the Retailer Who Looks Into Tomorrow

THE PROPRIETOR of the small retail store can avoid costly mistakes by following the suggestions in "Planning Your Business Ahead," a pamphlet prepared by the Domestic Distribution Department of the United States Chamber of Commerce.

This pamphlet shows how the retailer can plan his entire business a year ahead. Each step is illustrated by charts. The price of this pamphlet is 10 cents.

DOMESTIC DISTRIBUTION DEPARTMENT

United States Chamber of Commerce

Washington, D. C.

The Hotel as a Business Gauge

By Edward P. Borden Hotels Statler Co., Inc.

"THE BEST business barometer," said my friend, "is the undertaking business. When people die, the heirs do well by me if the deceased was making money. If he was poor, I have to set him up to a swell finale and then cool my heels for the dough."

"Balloon soup," said I, being a hotel man.
"My business is the best barometer. Take
the restaurants alone——"

And in truth hotel men possess a business trend indicator so delicate that the infinitesimal fluctuations of the needle are often ignored as meaningless, though they are the first signs of bad storms to come.

In all communities hotels and restaurants exist, designed to supply a constant necessity to the community, and reflecting in their profits and losses the general trend of business. Were it possible to isolate a single restaurant from such disturbing elements as competition, advertising, and quality of service (the human element), a single organization would serve as an accurate barometer for that community. As it now is, the figures for all or for a large part of the catering and hotel organizations will give the tendency so accurately as to obviate the necessity of guesswork in relation to the future.

A Simple Example

IN ORDER to demonstrate the operation of any scientific instrument, it is always best to start with the simplest form. In this case it is the pie house just outside the entrance to the Jones, Jones and Jones Steel Mill in Complacent, a typical mill town. John Schmidlap, who operates the pie house, doesn't keep any accounts. All he knows is that when the mill is shut down, he can go fishing. When the mill is running three shifts, he has a daily argument with his daughters as to which will take the afternoon in the restaurant while he gets some sleep so he can work at night.

Had Schmidlap the knowledge and understanding that goes into the elaborate accounts of the bigger businesses of the country, he would find he possesses many interesting and money-valuable facts:

When the mill has been in full blast for two months, he is doing a bigger business than at the end of one month. When it goes three months, he is doing better. When it goes to four months he has a line forming outside, and when it has been going five months, some young whippersnapper drags in a lunch wagon and absorbs his overflow. He would also find that when and after his business reaches capacity, his average check (average amount spent per designated meal) will increase, despite the fact that he can accommodate no more patrons during rush hours.

All this is easily explained. The mill hands, out of work, eat their meals at home and sit on their front porches figuring the amount of credit they can muster if the mill doesn't open before the first of the

month. When the mill opens again, they take their lunch in pails; they have debts still to pay. Mr. Schmidlap becomes more jovial but he doesn't feel his prosperity yet.

The worker pays his debts, if he has had to borrow, or he puts back his savings. Then, slowly or quickly, depending on the general feeling concerning the life of the new prosperity, the men begin to drift into Schmidlap's, at first for a cup of hot coffee to go with their sandwich, then for a piece of pie, and finally, as they are showing better in bank, for a full and substantial meal. "Why don't you get your lunch at Schmidlap's?" says the worker's wife. It saves her putting up the lunch and washing the dinner pail, and if she feels her man should have a hot meal, it saves her a walk to and from the mill. If she is not interested in whether he has a hot meal or not, he will prefer to eat at Schmidlap's anyway.

Then someone comes into the market with a price on steel rails that cuts into Jones and Jones' sales, perhaps only slightly. Jones and Jones have to cut down operating costs. Schmidlap feels it first (in his average check, if he has the faintest idea of what his average check is.)

The reason is obvious. Jones and Jones are looking through the mill and laying off a man here and there, cutting, doubling up, paring, trying to reduce expenses to a point from which they are still able to undersell the new competitor. The workers find their comrades going out and their places left vacant while their work is absorbed by the men near them. There is an uneasy feeling. The more provident men go back to the dinner pail, and their savings accounts brighten that much more rapidly. The rest run on until the first real shocks are felt, when Jones and Jones decide to lay off a whole shift.

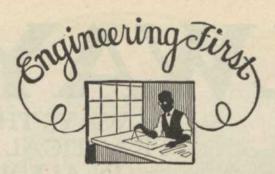
Schmidlap feels that acutely until it has been definitely demonstrated that the mill will continue on two shifts. The business is soon as good as ever, barring the night shift, which becomes a total loss.

The mill works steadily for a number of years. Mr. Schmidlap has become a power in the town. He has money in the bank and he owns real estate. He has a desire to send Rosie to college. He has joined the Chamber of Commerce, and the president of that organization tells him he should have some civic pride and open a first-class restaurant up town, where the business men can gather and lunch.

The Restaurant a Better Gauge

HE FINDS a buyer for his lunchroom every sense a more delicate instrument. Instead of covering only the steel business, it covers all business in that locality. Instead of reaching the worker, who suffers only when sales drop alarmingly, he is catering to the business man who owns his own business, who pays himself no salary but derives his living from the profits of his business, and who eats his lunch downtown for the dual purpose of saving time and of discussing business with his associates. And this man knows what business is doing.

The great commercial hotels are the finest barometers yet found. They indicate



Cuts the Expense of Drying 1-3 to 1-2

by reducing heat and dust losses, saving costly labor and space, and speeding up production

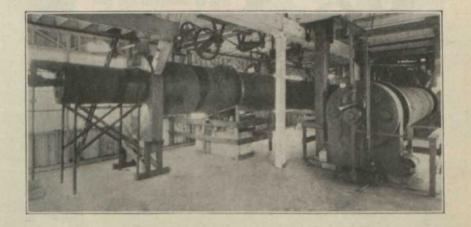
In many plants . . . possibly in yours . . . 65 to 75 per cent. of the heat employed in drying organic and inorganic materials is absolutely wasted!

Louisville Drying Engineers have cut this loss to a minimum by developing steam tube dryers which are 85% efficient. That is to say, only 15% of their heat input is wasted.

Only One of Many Savings

Aside from drying materials much more rapidly and thoroughly, Louisville Steam Tube Dryers are more efficient in many other ways. They occupy less space, require less labor, and greatly reduce dust losses and objectionable odors. Too, they deliver dried material continuously, permitting of continuous factory operation.

No wonder these dryers have reduced the cost of drying from 1/3 to 1/2 in more than fifty industries. Without obligation, Louisville Drying Engineers will study your problems and suggest a drying system that will pay for itself many times over.



DRYING MACHINERY COMPANY.

Hull St. and Baxter Ave. Louisville, Ky.

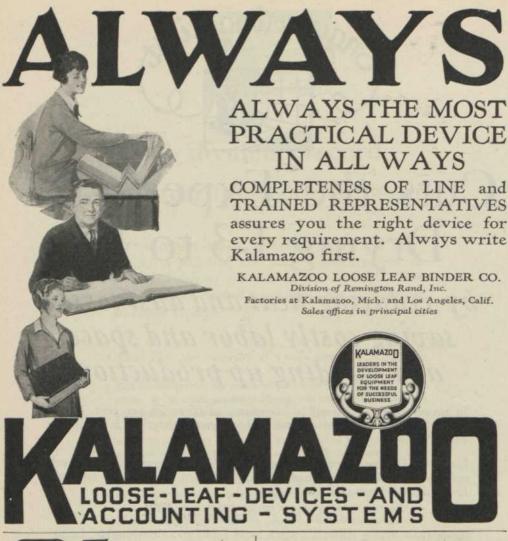
Cable Address, Loudry, Louisville, Kentucky

Pin to letterhead

Mail to Louisville Drying Machinery Co., Hull St. and Baxter Ave., Louisville, Ky., for further particulars of the service offered by Louisville Drying Engineers. No obligation.

Name.

When writing to LOUISVILLE DRYING MACHINERY COMPANY please mention Nation's Business





the trend of spending—which is business—with such infinite delicacy that they can see what will happen long before it happens, so long before that often the hotel man will not heed, and fails to take proper measures to secure his own profit.

The infinitesimal movements of the needle are caused by the individual condition of those traveling. In hotel restaurants alone this would be felt. Men selling anything and everything they can hang a price tag on have to come to the big cities to buy more, and they throw their money to the four winds, and nothing too good. Men feeling a slight falling off in sales rush to the big cities to stock up with the latest goods in an effort to stimulate sales, but they ask for a cheaper room and they eat club meals.

When business is really bad, your store owner feels that he had better not spend the money for the trip, and either avails himself of a resident buyer or buys from a well-known manufacturer by mail. Even the big stores will cut the number of buyers

sent to the city.

So much for the effect on hotels from business conditions. There is also the effect of general living conditions which makes itself felt in them, for the hotel is essentially a temporary home. Persons living in hotels permanently will adapt the hotel facilities to their incomes.

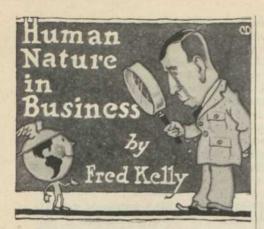
Metropolitan Hotels in Trade

THE IDEAL barometer is a composite financial picture of all hotels and restaurants in a given community, which is tantamount to saying a composite picture of all business, for the task of compiling such figures would be colossal. On the other hand, a carefully selected group of hotels, representative of all classes, whose accounts are accurate, would serve to give an accurate check on the business of that locality.

Because of the tremendous size of New York and its number of widely variant hotels, its position as buying center for many industries, and its place in the country as a center of many phases of social life, it is safe to say that figures from thirty representative hotels there would give an accurate picture of the nation's trend.

The same may be said of London for England, Berlin for Germany, Paris for France, and Vienna for Austria. Chicago, Manchester, Marseilles, Dusseldorf and other cities should be discarded as being too dependent on a single industry or on half a dozen affiliated industries, with the hotels in these cities barometers of these industries only. Pittsburgh will feel an influx if the steel business is good, New Bedford if the cotton mills are operating on full time, and the hotels will benefit thereby.

A little of this is bound to be felt in the capital or metropolis, all of whose hotels will house all visitors to the city, and will indicate, by greater or less numbers coming in, by larger or smaller average checks, just what the general feeling of the nation's business man is, just how good he thinks his prospects are for the future, and how prosperous he is at the moment. Bad business in one industry will offset good business in another, and it will not be until a depression or elation is general that there will be a reaction in metropolitan hotels.



THE HEAD of a certain great business corporation draws a salary of \$150,000 a year, but a few months ago confessed that he had been running considerably behind on personal and household expenses. A friend of his was telling me about this almost sympathetically.

"I can't feel sorry for a man unable to live on \$150,000 a year," I said.

"You must make allowances," said the



man's friend, "for the fact that he just naturally has expensive tastes. For instance, he keeps 164 dogs!"

A GROUP of American school children were asked to check a list of 45 occupations and professions in order of merit, ranking at the top the kind of work they would be most proud of and at the bottom the kind they would be more ashamed of than proud.

On the average, the banker ranked first, followed by the college professor, doctor, clergyman, lawyer, and automobile manufacturer.

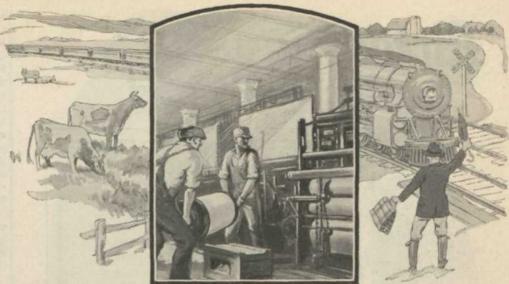
Last of all came the ditch-digger.

Just above this tail-end occupation ranked the street-cleaner, hod-carrier, teamster, waiter, janitor, and coal miner.

But now comes the surprise. In a similar test given to three different groups of Russian school children, from twelve to seventeen years of age, by Mr. Jerome Davis, of Yale University, first rank went not to the banker but to the peasant! Indeed, both banker and priest, invariably, in the opinion of the Russian children, belonged at or near the bottom.

The last ten places, according to one group of pupils, starting with what they considered the lowest, were: preacher, prosperous business man, manager of a small factory, banker, storekeeper, coachman, waiter, owner of a store, street-cleaner, house-porter.

TWENTY years ago, says the manager of the street railway company in a great industrial city, from 85 to 90 per cent of street car passengers in morning and evening hours were men. This



SUPPOSE THE 20th CENTURY Stopped at every Crossroad!

Tramrail Stocks in the Following Cities

ALBANY
93 State Street
BIRMINGHAM
2028 First Avenue
BOSTON
44 Bromfield Street
BROOKLYN
91 Clifton Place
BUFFALO
240 Sanders Road
CHICAGO
555 Washington Blvd.
CINCINNATI
701 Union Central Bldg.
DENVER
1226 E. 17th Avenue
DETROIT
149 E. Larned Street
LOS ANGELES
430 E. Third Street
LOUISVILLE
513 Columbia Building
NEW YORK
50 Church Street
PHILADELPHIA
2401 Chestnut Street
PHILADELPHIA
2401 Chestnut Street
PTITSBURGH
412 House Building
SAN FRANCISCO
16 California Street
ST. LOUIS
11th & Locust Streets
SYRACUSE
404 So. Clinton Street

What havoc it would work with the schedule of this famous train! What loss of time! What waste of costly equipment!

Yet the same kind of waste is going on every day in thousands of American factories. Expensive, high speed machines and skilled operators are held up many minutes waiting for a laborer to take away the finished product, or to bring raw material.

Textile looms and paper machines are stopped when the bolt of goods is a size for convenient handling. The working capacity of automatic machines is limited by the size of tote box a man can carry. The Cleveland Tramrail System is the only complete system of separate handling units that will handle large loads to and from each machine, from raw materials—receiving room, through the entire process, and deliver the finished product to the shipping department.

Cleveland Tramrail Engineers can fit moving to the making of your product and make the Tramrail System an indispensable part of the production machinery itself. Arrange for an interview by phone or letter and let one of these skilled engineers show you how to move it while you make it.

CLEVELAND ELECTRIC TRAMRAIL DIVISION The Cleveland Crane & Engineering Co., Wickliffe, Ohio



Packages insured as verapped



No waiting your turn at crowded windows, no extra handling of windows, no extra handling of packages, no delays and no red tape in collecting on packages stolen or destroyed in the mails. That's the satisfaction of North America Parcel Post Insurance. Coupons from a North America Coupon Book insure each package at the wrapping desk - and cost but a few cents.

Ask the North America Agent or send the attached coupon for full information.

the North America

"The Oldest American Fire and Marine Insurance Company"

Founded 1792

Insurance Company of North America Sixteenth Street at the Parkway Philadelphia, Pa., Dept. N-11

Wants information on Parcel Post Insurance



you will find in the Atlanta Biltmore one of the world's truly great hotels. Some of our guests who are much-travelled have declared that it is the "finest hotel in the nation." Located in a four acre park, free from city noises, immediately accessible to theatrical, business and shopping districts.

A Bowman Biltmore Institution "Where Southern Hospitality Flowers"

Rates from \$3.50

ATLANTA BILTMORE "The South's Supreme Hotel"

Jno. McEntee Bowman, Pres. Wm. Candler, Vice-Pres. H. B. Judkins, Manager W. C. Royer, Asso. Mgr.



Give Fruit Cakes for Xmas

BOTT MFG. CO.

Arcade Bldg.

Little Rock, Ark

was true even after allowing for the great number of women who rode into the city to go shopping or to attend matinees. But today the situation is almost reversed. From the less fashionable side of town, three-fourths of the rush-hour riders are women and girls. A considerable proportion of these are married. They keep right on working after marriage to make enough money to live as they did when with their parents. Others work to avoid going to school and to have money for permanent waves, facial massages and clothes.

THAT recalls what a restaurant manager told me of the great number of girls who stay out late, oversleep, and don't have time for breakfast before rushing to work. Then they are so hungry at noon that their lunches use up half their wages.

THE GREAT number of women who stick to their jobs, or take jobs, after marriage, has brought about a changed attitude of employers toward women workers. It used to be that a woman quit her job to get married just about the time that she was becoming useful. But today married women are more capable, more responsible, and more satisfactory in every way than business women have ever been.

A RECENT analysis of deliveryman's work shows that it calls for more intelligence than it usually receives. That is, the work requires intelligence above nor-



mal, but tests show that delivery men average below normal. No wonder so many parcels are left at the wrong place!

KNOW a banker who is supposed to be a mere thinking-machine and hardboiled. But one day two young women employed in humble jobs in the bank were arrested in a strange city on a false charge while on their vacation. Various members of the bank's board of directors expressed regret about the girls' plight. But the hard-boiled old chap said: "I think I'll jump on the train and go to see if they need help." Whereupon, he sent for the highest-priced attorney in town to accompany him and the next day had the girls safely on their way homeward.

"So MUCH money is held in trust for young men all over the United States," says an employment manager of one of the largest industrial corporations, "that it becomes more and more difficult each year to find the right kind of salesmen."

I didn't see what the relation was between money in trust funds and salesmen,

and he went on to explain:

"It used to be that a young man with an independent income was unusual, but today he is common. He can't squander his inheritance, as in the good old days, for the

principal is held in trust and he has only the income. He may not have enough to live on, with all the luxuries he wants, but he is at least sure of enough to pay his rent—and that's just the trouble. The ideal salesman is one who isn't sure where the rent money is coming from unless he keeps hustling. No sales manager likes to have a force of men including too many who lack the incentive of having to earn every cent they spend. But if he hires, say, 100 men having a good acquaintance among wellto-do people, the chances are that he will have many who aren't compelled by economic necessity to work. I know of one big concern with several branch agencies that recently weren't doing well. Investigation at each place showed that they had too many young men enjoying assured incomes.

THE BOARD of directors of a big corporation was considering whether to take out a half million dollar life insurance policy on the president. Since he had long been the guiding spirit, it was felt that his death would damage the company at least to the amount of the proposed insurance. But one director, whose opinion finally prevailed, made this suggestion:

"Why not spend the amount of the insurance premiums on more salaries for better assistants and thus get this business so well organized that one man's death won't be a serious blow?"

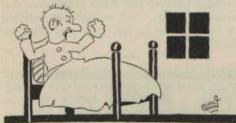
A FLY-PAPER manufacturer has had to develop new products to avoid bank-ruptcy. He blames his troubles on automobiles which drove out horses and horse-stables, where flies found breeding conditions most favorable.

IN NEW YORK CITY recently I didn't use a telephone all day long except automatic phones, and I got to wondering if such devices can entirely take the place of old-fashioned girls who used to say:

"Mr. Smith's phone gives no answer, but I think they are all over at his wife's mother's house."

Every reporter, especially police reporters, as well as business men in nearly every line, can testify to help received from telephone operators.

THE ELEVATOR man in a big office building says that he has worked in a number of different buildings but always finds that about the same percentage of business men come down early in the morning. They get up at 6 o'clock or earlier and are at the office a full hour ahead of anybody else. They say that they can get more done in that clear-headed, quiet hour



than in any three hours during the rest of the day. Most of these early risers, says my friend the elevator man, were raised



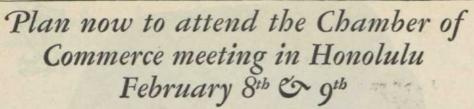
Non-Skid Hi-Type The All-Service Truck Tire

Here is a truck tire with cushion, traction and long mileage equal to practically any hauling work your trucks will be called on to do. It is a high profile tire, with extra rubber to protect trucks and loads—even of fragile nature. The powerful non-skid tread is effective on wet, oily pavements or in soft going. Long wear is insured by the great depth of the tread, the tough rubber compound and the scientific method of stabilizing the tread units with connecting bars of rubber. Trucks and trailers of all sizes can use this tire for single or dual equipment, as it is built in all S. A. E. sizes from 4" to 14". Ask the Firestone Service Dealer in your locality about this tire, and the complete service he is equipped to give.

Trestone

AMERICANS SHOULD PRODUCE THEIR OWN RUBBER JAMES STATESTERS

IF you are not already a NATION'S BUSINESS subscriber send in this handy coupon.	203
To the U. S. Chamber of Commerce Washington, D. C.	MA
Send me Nation's Business, your official monthly publication, beginning with the December number. Bill me later for \$7.50 for the three year term-subscription (OR: I enclose remittance with this coupon).	
NAME.	
Address	D)
CITY AND STATE	





the new giant yacht

will take you

Hawaii in mid-winter - its wonderful golf courses, the limpid waters of Waikiki, its nights under a tropic moon-music, scenery incomparable-what more can you ask for a meeting place than can be found at the 'crossroads of the Pacific'.

And to take you there or bring you back, the swiftest, most luxurious vessel ever built in the United States-the great, new MALOLO with 150 private baths, two motion picture theatres, gymnasium, Pompeian swimming plunge, the salons and halls of a great hotel.

Special reduced fares to those making the trip to the Chamber of Commerce meeting. The coupon will bring complete information, or ask any travel agent.



nawaii

Matson Navigation Company: I am interested in making the trip to Honolulu to attend the Chamber of Commerce meeting.

Please send me complete information.

Address

215 Market St. San Francisco

140 So. Dearborn St. Chicago

510 W. Sixth St. Los Angeles

1319 Fourth Ave. Seattle

Scientific Facts

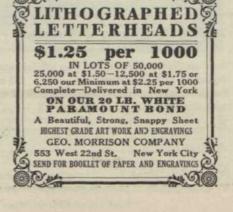
About Diet

A CONDENSED book on diet entitled

A "Eating for Health and Efficiency" has
been published for free distribution by the
Health Extension Bureau of Battle Creek,
Mich. Contains set of health rules, many of
which may be easily followed right at home
or while traveling. You will find in this book
a wealth of information about food elements
and their relation to physical welfare.

This book is for those who wish to keep where.

HEALTH EXTENSION BUREAU —438 GOOD HEALTH BLDG. BATTLE CREEK, MICHIGAN



on farms, and no amount of city life can overcome their early habits.

Since the tendency is for business men to get to their offices later and later, to take much time off for lunch, and to play golf in the afternoon, an early-rising man has his troubles trying to make telephone calls or get interviews.

AN OLD reporter tells me that business men have a peculiar diffidence about expressing gratitude to newspaper men for friendly comment. They know that such comment is not done with any thought of reward or praise and fear that expressing thanks would be akin to offering flattery.

"I have written facts that helped railroad mergers and other big business deals," said this reporter, "but I have yet to hear so much as a casual reference to my article from those most concerned, even though such publicity may have meant millions to

THE EDITOR of a famous newspaper THE EDITOR of a famous relations and answers tells me that farmers almost never make inquiries about farm problems. Those most likely to ask questions about raising chickens, soil productivity, or care of an or-chard are city people who dream of being farmers. Branches of public libraries lo-



cated near sailors' quarters nearly always have a big demand for books on chicken raising, because, after a hard trip at sea, a little chicken farm is many a sailor's idea of earthly joy.

A BASEBALL manager remarked to me recently that cooperative management, between boss and hired man, is not practical in the baseball business. year one of the big league teams tried it. Each player was one of the proprietors of the team under a form of cooperative management. Several of the players were on a board of strategy. But the team landed well toward the bottom of the race

by the end of the season.

"'Go out there and play ball, fellows!'

That is the only way to handle a ball team," says this manager. "If the boss and the men are on committees together, there is no discipline. One trouble with business today is too many proprietors, too many captains. Not enough are satisfied to be privates in the rank and take or-

THE Industrial Fatigue Research Board of London reports that liability to accident is a measurable human aptitude, They have devised a number of ingenious tests for forecasting accident liability. One thing they learned was that men most likely to have accidents are those more than usually ready to "report sick."





That desirable combination-wear resisting and slip-proof effective-ness—are obtained by employing Norton Alundum Aggregates em-bedded in the finish coat of cement. BUT a Norton Floor in any wet place is practically nonslip.

Take for example this milk station floor-non-slip wet or dry. It is a concrete floor with Alundum Aggregates embedded in the surface.

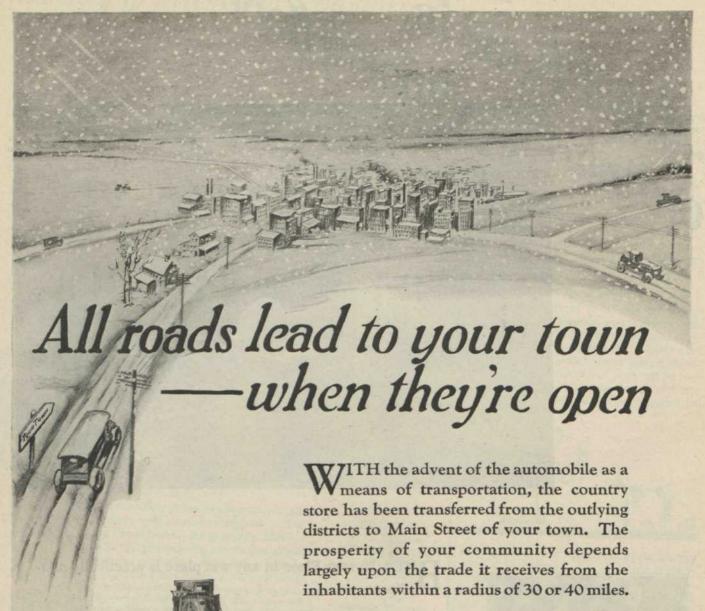
The permanency of "Norton Floors" and their proof against slipping hazards has been established by installations indoors and out.

> NORTON COMPANY WORCESTER, MASS.

Grinding Wheels Grinding Machines



Refractories-Floor and Stair Tiles



Good Roads Champion Blade Type Snow Plow turns a motor truck into a snow fighter in 10 minutes.



Send for catalog. It contains much help-ful information on the subject of snow removal. No cost—no obligation.

When Winter lays its white mantle will your town report, "Business going on as usual", or "Everything at a standstill"? The answer depends on what you are doing in the way of organized snow removal.

Clear the road to Prosperity by clearing the roads to your town!

THE GOOD ROADS MACHINERY CO., Inc. Kennett Square, Pa.

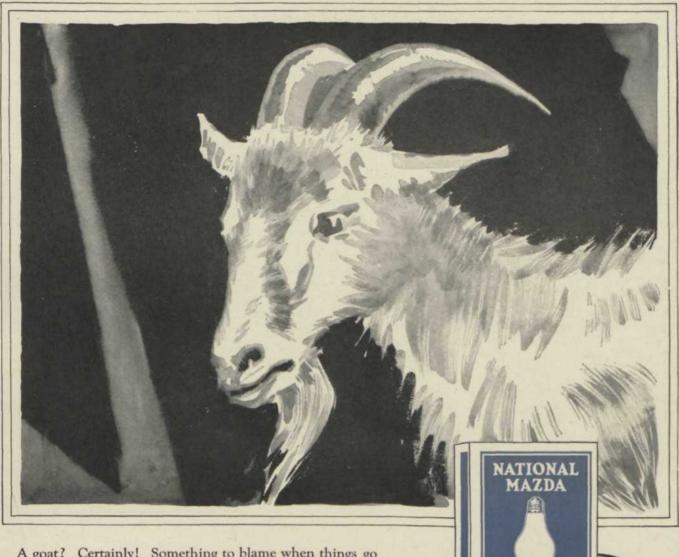
PITTSBURGH, PA.
1523 Oliver Bldg.
NEW YORK, N.Y.
50 Church St.
PHILADELPHIA, PA.
2057 Comm. Trust Bldg.
ALBANY, N. Y.
36 State St.



WATERTOWN, MASS. 36 Picanant St. PORTLAND, ORE. 3rd & Hawthorne Sts. GHICAGO, ILL. 49th & Halsted Sts. BUFFALO, N. Y. 733 Ellicott Square Bidg.

Good Roads Snow Plows

Every Factory Should Have One



A goat? Certainly! Something to blame when things go wrong—

—especially when poor lighting is spreading its disturbing influence through the factory.

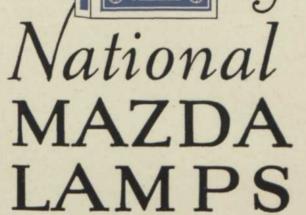
Poor lighting has slyly been goat-making for years. Getting blame laid on men, machines, production methods—on anything at all. And innocently standing by.

Wrong lighting is always causing expense and trouble that somebody has to answer for. It makes seeing more difficult, and is therefore a barrier to speed and accuracy. It makes eyes—and nerves—tire more quickly, and thus contributes to errors and accidents. Yet such lighting is easy to get rid of—and good lighting is easy to have.

Ask your electrical contractor or your electric lighting company to tell you just how to put your factory lighting on a productive basis. Or write us direct.

NATIONAL LAMP WORKS of General Electric Co., NELA PARK, CLEVELAND

Only lamps which bear the MAZDA mark are made with the benefits of MAZDA Service—the special service of the Research Laboratories of General Electric Company,



LAMPS





Here's to Camel-on a million tables!

HERE'S to Camel. How much added pleasure it brings to the world. Wherever congenial friends gather, or in the solitary hours of work or travel, Camel insures the enviable mood of enjoyment.

All of the mysterious powers to please of the choicest Turkish and Domestic tobaccos grown are brought to fulfillment in Camel. This is done through a smooth and mellow blend that cannot be found anywhere else. For America's largest tobacco organization concentrates its abilities in Camel. Into this one brand goes all of its power to select and buy and blend for taste satisfaction. There simply are no better cigarettes made at any price.

Camel's mildness and mellowness are the favorites of particular modern smokers. So much so that Camel's popularity is greater than any other cigarette ever had. For your enjoyment of the smoothest smoke ever made, "Have a Camel!"

R. J. REYNOLDS TOBACCO COMPANY, WINSTON-SALEM, N. C.